January 28, 2015

Connie Cummins, Forest Supervisor
USDA Forest Service
Fremont-Winema National Forest
1301 South G Street
Lakeview, OR 97630
Attn. Lucas Phillips ljphillips@fs.fed.us Katie Blazer <kblazer@fs.fed.us>
comments-pacificnorthwest-fremont-winema@fs.fed.us

Re: Antelope Grazing Allotments Project Draft Environmental Impact Statement dated December 2014

Klamath Siskiyou Wildlands et al. Comment Letter #1

Dear Connie Cummins:

The Klamath Siskiyou Wild lands Center supports active conservation that will recover Oregon spotted frogs and protect sensitive species associated with Jack Creek and its ground water dependent ecosystems. Since about 2008 we have had to intervene to prevent the Fremont-Winema Forest from instituting harmful livestock grazing in sensitive wetlands, fens, and streams that are habitat to Oregon spotted frogs and numerous other sensitive species.

New field information from 2013 citizen monitoring of Oregon spotted frog habitat in Jack Creek reveals that short duration grazing results in severe habitat degradation as cattle and frogs are concentrated in ever shrinking open water habitats. Unfortunately trespass grazing ultimately resulted in the mortality of one frog and likely many others. New analysis in the August 2013 proposed listing of Oregon spotted frogs found that there is no benefit from summer grazing of oviposition areas such as those on Jack Creek. The best available science from the proposed listing indicates that grazing is counterproductive on sites like Jack Creek where winter snow pack pushes down the grass and grass-like vegetation. Furthermore, there is no dense reed canarygrass at oviposition sites on Jack Creek that could benefit from grazing. The premise for Alternatives 3 and 5 (that short duration grazing in frog habitat would have net benefits) has been shown to be false with direct field observations on Jack Creek and the analysis of grazing studies in the 2013 proposed spotted frog listing.

Short duration cattle grazing in Jack Creek Oregon spotted frog habitat caused severe trampling damage and likely degradation of water quality due to cattle urination in small stagnant pools used by Oregon spotted frogs (photo at right). One frog mortality was documented in a hoof print (left photo) and many others likely perished when cattle and frogs competed for water in small pools. Frog photo by Terry Simpson on 5 Oct 2013 and trampling damage photo on 1 September 2013.

None of the EA alternatives adequately address the need for recovery actions to restore sensitive / threatened species habitat and recover species to viable numbers in the unique Jack Creek/Walker Rim ecosystems. The EA fails to identify the underlying need to revise or amend the 1990 Winema National Forest Plan land use allocations and management direction for Jack Creek and associated Walker Rim Groundwater Dependent Ecosystem prior to authorizing further annual grazing permits. New information since 1990 about fens, groundwater dependent ecosystems, rare plants, spotted frog declines, and Miller Lake lamprey precludes certainty of protection and restoration due to inherent conflicts and risks caused by annual authorized livestock grazing and anticipated connected impacts of chronic trespass grazing. Similarly, circumstances have greatly changed since 1990 with the August 2013 proposed listing and designation of critical habitat for Oregon spotted frogs; the loss of beaver ca 2000 and subsequent 2012 beaver introduction, and 1998 acquisition of Round Meadow and other wetlands into Forest Service ownership. These changed circumstances create inherent conflicts with the proposed ten year Antelope Allotment Management Plan not envisioned with the 1990 Winema Forest plan. The proposed ten year AMP with Alternatives 2,3, and 5 would inappropriately commit this unique area to livestock grazing as the de facto dominate use for the next 10 years.

The current Winema Forest Plan situation with proposed listing of Oregon spotted frogs is similar to the 1980s failure of outdated Forest Plans to provide adequate habitat protection for the northern spotted owl while the Forest Service proceeded with timber sales in spotted owl habitat. Piecemeal project level protection for spotted owls was found to be inadequate for needed programmatic landscape/forest level planning. Similarly, livestock grazing must be suspended in Oregon spotted frog habitat while pro-active Forest Plan revisions/amendments are made to provide increased certainty about recovering threatened species and protecting sensitive species in Jack Creek /Walker Rim ecosystems. The Fremont-Winema Forest needs to: 1) suspend annual grazing permits for pastures containing Jack Creek and associated Walker Rim Groundwater Ecosystems (modified Alternative 4); and 2) initiate a Winema Forest Plan revision or amendment to develop ecologically based management (i.e. active management)

for this unique area consistent with pro-active conservation as defined in the Endangered Species Act. Recovery of Jack Creek Oregon spotted frog population is dependent on active management to create additional open water habitat. Removing cattle is necessary but not sufficient for recovery. Currently, habitat projects to create open water habitat for Oregon spotted frogs languish while Fremont -Winema staff is preoccupied with supporting livestock grazing as the dominate use in the Jack Creek/Walker Rim area.

Annual Operating Instructions for livestock grazing within and adjacent proposed critical habitat or occupied Oregon spotted frog habitat will likely adversely affect Oregon spotted frogs and puts the Jack Creek Oregon spotted frog population at high risk for extirpation. Therefore, we recommend a conservative approach to decision making that avoids making ten year commitments to excessive and costly fencing[1] to implement complex and untested grazing regimes in proposed Oregon spotted frog critical habitat or occupied habitat (i.e. The. Modified Proposed Action). We recommend that the anticipated AMP decision include the following that is most similar to Alternative 4:

1. All existing riparian exclosures be identified for no grazing as stated on p. 2-7 of EA: "no grazing would be authorized within the existing fenced riparian areas in the Chemult Pasture known as Round Meadow, Jack Creek, Dry Meadow, Squirrel Camp, Rider's Camp, Cannon Well, Sproats Meadow, Johnson's Meadow, and Wilshire Meadow. Grazing would also not be permitted on NFS lands within the fenced portion of Jack Creek's perennial reach." In addition, exclosure fences would be maintained/upgraded by the Forest in year 1 of AMP.
2. The Chemult portion of the allotments would be administratively closed to grazing responding to the concern to protect both non-fen riparian areas and fen habitat (sensitive plant and animal habitat), and not expand grazing into the North Sheep Pasture, and not rebuild/construct new fencing along active allotment boundaries.
3. There would be no authorization of grazing in the North Sheep Pasture. No fence building to facilitate future grazing in the North Sheep Pasture although some fence building may be necessary to exclude trespass livestock from spotted frog habitat.
4. Construct new exclosures /protection fences around sensitive springs and fens as identified in Modified Proposed Action (EA p. 2-6). Construction of new exclosures/protection fences around sensitive springs and fens on the Silver Lake side on the allotment These new exclosures would be in areas that are currently grazed. None would be constructed so as to reduce the extent of current exclosures.
5. The 3.5 mile Round Meadow fence built in 2003(EA 3-121) would be maintained to exclude livestock year round. Full marsh restoration to wetland condition will be pursued to develop a potential spotted frog introduction site and increase ground water recharge of Jack Creek.

The following substantive comments are provided by Richard Nawa on behalf of Klamath Siskiyou Wildlands Center, Oregon Wild, and Center for Biological Diversity. Mr. Nawa has previous experience as BLM wildlife biologist and wrote wildlife/fisheries portions of BLM grazing impact statements for eastern Oregon BLM districts.

[1] Permittee share of costs for year 1-2 Alternative 3 is $222,160 but only $26,839 for Alternative 4 (EA2-28)

New Information and Changed Circumstances

1. **We object to the EA because it is not supported with an updated Biological Evaluation for Oregon spotted frogs that includes new information about 2013 Jack Creek Oregon spotted frog trampling mortalities, new distribution of Jack Creek spotted frogs in North Sheep pasture. Best available scientific information in the Oregon spotted frog proposed listing indicates a lack of a scientific basis for using livestock grazing to improve Jack Creek spotted frog habitat as described in alternatives 3 and 5.**

On August 29, 2013 the USDI Fish and Wildlife Service proposed listing of Oregon spotted frog and proposed designation of critical habitat.[2] The Proposed Listing 78FR:53620 states:

> "Section 7(a) of the Act requires Federal agencies to evaluate their actions with respect to any species that is proposed or listed as an endangered or threatened species and with respect to its critical habitat, if any is designated. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402. Section 7(a)(4) of the Act requires Federal agencies to confer with the Service on any action that is likely to jeopardize the continued existence of a species proposed for listing or result in destruction or adverse modification of proposed critical habitat."

The Biological Evaluation process (FSM 2672.43) is intended to conduct and document activities necessary to ensure Proposed Actions will not likely jeopardize the continued existence or cause adverse modification of habitat for a species listed or proposed to be listed as endangered or threatened by the Fish and Wildlife Service. The existing BE supporting the EA is defective because the Forest Service failed to conduct an up to date survey for spotted frogs on Jack Creek and failed to inventory habitat quantitatively. Egg mass data through 2013 has not been reported or analyzed. New information about spotted frog detections in the North Sheep pasture is not reported or analyzed for proposed livestock impacts. New information about spotted frog habitat damage and deaths from short duration grazing along Jack Creek is not reported or analyzed. New information from the Proposed Oregon Spotted Frog listing has not been incorporated into the BE. The Proposed Listing does not support the use of livestock to improve oviposition sites in areas like Jack Creek that have snow pack to push down grass and do not have (as yet) dense growths of reed canarygrass. The Forest Service must prepare an updated BE to fully evaluate proposed federal grazing along Jack Creek and connected trespass grazing that would likely contribute to the need for federal listing. The BE must

[2] Proposed Critical Habitat 78FR5358-53579 is accessed at http://www.fws.gov/wafwo/species/osf/OSF_pCriticalHabitat_FR.pdf and Proposed Listing 78FR553582-53623 is accessed at http://www.fws.gov/wafwo/species/osf/OSF_pListing_FR.pdf

be updated to include the best available scientific information published in the August proposed listing and proposed critical habitat.

2. **We object to the EA and supporting BE because they failed to include new information about 2013 Oregon spotted frog sightings in Jack Creek that significantly increases its known distribution into the North Sheep Pasture. The EA/BE fails to discuss proposed grazing impacts to these newly discovered frogs in the North Sheep Pasture.**

Table 3-7 in the EA and EA narrative fail to describe new 2013 detections of Oregon spotted frogs in Jack Creek in the North Sheep Pasture and also points to the need for an up to date survey of all spotted frog habitat along Jack Creek. No survey of spotted frog habitat and presence has been made recently to support impact assessment. The EA fails to discuss grazing impacts to newly discovered frogs in the North Sheep pasture from various alternatives and connected trespass grazing It is important to note that the North Sheep pasture is not currently authorized for grazing and the absence annual authorized livestock grazing may have contributed to the survival of Oregon spotted frogs in what was formerly not considered habitat capable of supporting Oregon spotted frogs.
The EA analysis of Oregon spotted frog habitat for Jack Creek needs to be extended at least 3 miles below Winema National Forest Road 88 Road because during July-October 2013 Terry Simpson observed several spotted frogs in the vicinity of Yellow Jacket Spring/Davis Flat (Photo 1, Map 1)

Terry Simpson reported the following in an email dated July 29, 2013 to Fremont-Winema Forest staff:

> "Good morning folks, I was out looking for the wayward beavers and came across these osf. UTM coordinates are in the pic file title.
>
> The subadult was in the pool below the 8821 Rd culvert. This is the same location where I saw 2 juveniles in September 2012 and where Ryan Siebdrath saw an adult in the early 2000's. I did not catch the frog, but estimate length just over 1.5". Not much water left at this site, but the frog can move downstream to a series of larger and deeper pools. No idea which pools in this area will persist through this dry spell. The creek stopped flowing in this area over 3 weeks ago. I saw Iverson brand cattle watering out of this site. It's about a quarter mile south of the allotment.
>
> The other pic is a juvenile osf in the final stages of metamorphosis. Look close and you can still see a tail stub. This pool is about a quarter mile below the 88 Rd bridge. There was a second frog in the same pool but I never got more than a look at its head before it disappeared. Looks like this pool is getting some off channel water support. I also saw Iverson brand cattle here. **It's about 2.5 miles as the crow flies south of the [Antelope] allotment.**
>
> This juvenile is over 4 miles below known breeding this year. What about the timing of metamorphosis compared to those above in known sites? This is the

earliest I've seen on Jack Creek. So where did these frogs come from? These two frog sightings and those made in the past suggest that osf are overwintering and breeding in this section of the creek. **This represents a significant extension of current known and occupied osf habitat on Jack Ck. Add in the extensive historic beaver activity through the entire area and it may have once been a great place for osf. It too needs serious management consideration.**

The creek from the 8821 Rd downstream to the juvenile osf pool below the 88 Rd bridge has a deeply incised channel for most of its distance. Average is probably 5' deep but there are places nearing 8' and others 2'. I encountered 5 sections of dry, rock armored channel and 3 off channel seep areas providing surface water. Pool habitat is far more extensive through this section of creek than anywhere else on the creek, but flowing water is absent and water levels in remnant pools are dropping fast at this time. Many pools have less than a foot of water now.

I took some pics of the pool habitat and will send a few in a second message. I make the rest available if you want a copy.

I encountered 4 herds of Iverson cattle along this section of the creek. Cattle signs are everywhere. They are tearing up the pools and walking on top of frogs getting a drink.

I found recent beaver chews throughout this distance of creek, but no indication of concentrated use or dam building. There are so many remnant beaver runs, bank dens and side channels that they could be there and I just missed them. One group of the relocated beavers overwintered just above the 8821 Rd and may be using this area this summer as well. The radio tagged female traveled through this area to where the juvenile osf was found and then went back upstream above the headcut area in May before going off the air. The beavers are showing interest in this area despite low water conditions at this time. I'd be glad to show you the sites. T ” (**emphasis added**)

Presence of both juveniles and adults below road 88 suggest a breeding site. Hammerson (2005 as cited in 78FR53587) recommends that a 3.1-mile (5-km) dispersal distance be applied to all ranid frog species, because the movement data for ranids are consistent. Consistent with Hammerson findings, two juvenile frogs at a Jack Creek site in Oregon were recaptured the next summer 4,084 ft (1,245 m) and 4,511 ft (1,375 m) downstream from where they were initially marked, and one adult female moved 9,183 ft (2,799 m) downstream (Cushman and Pearl 2007,p. 13 as cited in78FR53587). For analysis purposes in the EA, potential habitat identification needs to consider that Jack Creek frogs are known to make relatively long distance movements of several miles. Occupied and potential Oregon spotted frog habitat needs to be extended 3 miles further downstream on Jack Creek to reflect new scientific information collected and reported by Terry Simpson and documented in this comment letter.

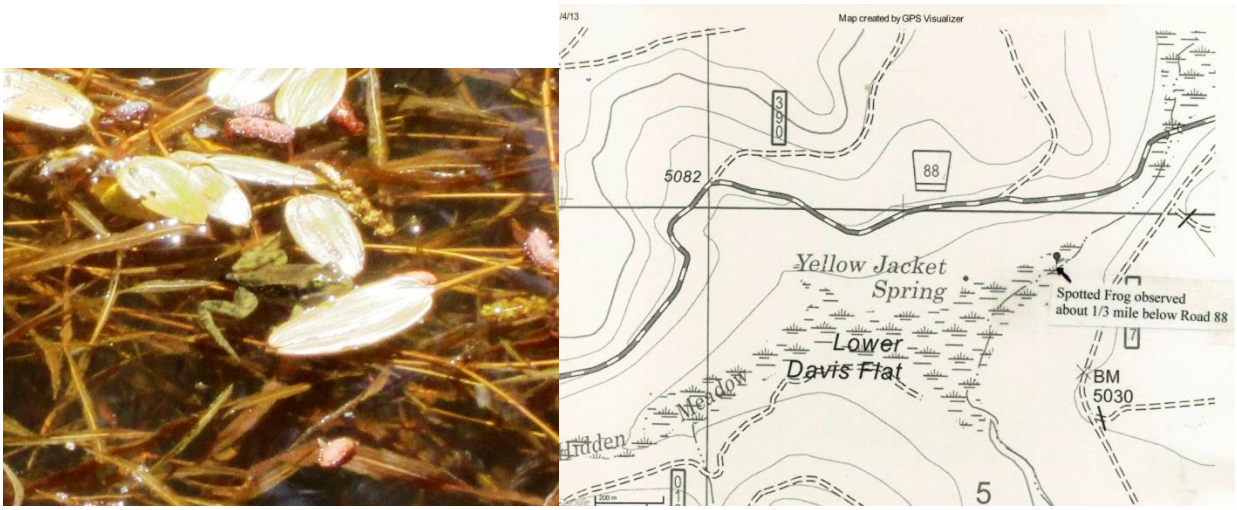

Photo 1. Map 1. Oregon spotted frog detected in Fremont- Winema National Forest. Several Oregon spotted frogs were observed by Terry Simpson in Jack Creek in the vicinity of Yellow Jacket Springs and Lower Davis Flat during summer/fall 2013. Occupied and potential Oregon spotted frog habitat in Jack Creek needs to be extended at least 3 miles or more below Road 88. Photo by T. Simpson 27 July 2013, UTM 617455;4781846.

3. **We object to the cursory, speculative and inaccurate description of trespass grazing impacts in the EA. Trespass grazing has been field documented to have chronic and serious impacts to Jack Creek Oregon spotted frogs and their habitat.**

With respect to livestock grazing and direct trampling the EA:73 states that **"**Currently there is no [permitted]grazing within 181 acres OSF habitat, with the exception of possible trespass of cattle." The EA states on p. 82 for alternative 2: "It is expected that some cattle may periodically get through the fence into these areas. If this occurs, the permittee would be alerted immediately to remove cattle from the area. Although the potential is slim, this could result in trampling of frogs. Due to the short duration of grazing from potential trespass, potential impacts such as a potential decline in water quality, reduction in vegetation that provides cover and prey habitat, establishment of cattle trails that may divert water, loss of water from livestock drinking, and a reduction in residual vegetation in breeding habitat are expected to have negligible impacts to OSF habitat (Table 3.15)."

These statements about trespass grazing are speculative and misleading. The EA is clearly wrong for assuming that every trespass grazing incident would be detected and corrected prior to grazing damage. The EA statements about trespass grazing are falsified by actual observational information from summer 2013 about actual grazing impacts to Oregon spotted frogs and spotted frog habitat from trespass livestock grazing that were documented to appropriate Forest Service staff (Photos 2,3,4) . The EA failed to acknowledge the significance of this new factual information or include it in the EA with accurate statements. Although trespass grazing was reported on at least 6 different days, it appears that Forest Service staff did not investigate these incidents or document impacts caused by the trespass grazing. Thus, the repeated statements in the EA about trespass grazing having "negligible" impacts is specious because it appears that Forest Service staff did not investigate the actual incidents of trespass grazing. The EA ignored 6 incidents of trespass grazing on Jack Creek,

ignored documented habitat damage, and ignored a frog mortality. There are simply too few frogs to assert that even the avoidable loss of one frog is 'negligible".

During summer/fall 2013 Terry Simpson and Jayne Goodwin reported at least 6 incidents of unauthorized cattle grazing on the Fremont-Winema National Forest that were in direct conflict with habitat needs of Oregon spotted frogs. This frequency of trespass grazing is not "new" as trespass grazing has been a chronic impediment to spotted frog recovery for at least 5 years. Excerpts of their emails are documented below:

a. Terry Simpson reported the following trespass grazing in an email dated July 29, 2013 to Fremont-Winema Forest staff:

"I encountered 4 herds of [trespass] Iverson cattle along this section of [Jack] creek. Cattle signs are everywhere. They are tearing up the pools and walking on top of frogs getting a drink."

"I saw Iverson brand cattle watering out of this site. It's about a quarter mile south of the allotment."

b. Jayne Goodwin reported the following trespass cattle grazing along Jack Creek in an email dated August 15, 2013 that was sent to Fremont -Winema Forest Service staff and others:

"Hello Forest Folks,

Here's a photo of Iverson cattle outside Antelope C&H Allotment below the fence between Lower Jamison and National Forest land. I took this photo on 8/14/2013. Terry Simpson saw cattle in this same area on July 27, 2013 and reported the sighting to Forest personnel. **This unauthorized use has been a regular and repeated occurrence for a number of years. Why does this unauthorized use continue to occur?** These cattle have access to rapidly diminishing Oregon spotted frog pool habitat in Jack Creek in this area. Please let me know how you'll remedy this problem. I'm available to discuss on-the-ground.

On August 14, 2013 Terry Simpson saw 13 pairs of cattle bedded down by Oregon spotted frog pools in Yellowjacket Spring area (miles off the allotment). They headed south down the creek toward O'Connor Mdw. There was another group of at least 6 cattle in the trees nearby that headed west toward Hidden Meadow.

I would appreciate your immediate attention to these concerns."

Photo 2. Unauthorized (trespass) cattle below Lower Jamison fence and outside permitted Antelope Allotment, Fremont-Winema National Forest, Oregon. These trespass cattle now have access to occupied Oregon spotted frog habitat where they seriously damage habitat needed by frogs to complete life cycle. Photo by Jayne Goodwin on 8-14-2013.

c. Terry Simpson reported the following trespass cattle grazing along Jack Creek in an email dated September 2, 2013 to Fremont-Winema Forest staff;

"On September 1, I saw 3 pairs of cattle on lower Jamison between the private fence and the allotment boundary fence. Again, this part of the Antelope allotment does not have authorized grazing. Cattle were seen here and reported to you on July 29, August 15, August 19, and August 20.

4 cows were in Jack Ck getting a drink from the pool with the 18 spotted frogs observed August 20 (UTM 0615594, 4786101). See the first attached photo. This is proposed Critical Habitat for spotted frogs. Water levels in this pool are down to inches in the hoof prints. Frogs are moving from hoof print to hoof print. See the 2nd and 3rd photos attached (Also UTM 0615594, 4786101).

There were also cattle just below the allotment boundary fence at lower Jamison. I estimate about a dozen pairs that disappeared in the trees heading downstream toward the 8821 Rd. This area is also proposed critical habitat for spotted frogs and is off the allotment.

The 4th pic shows the spotted frog pool at the 8821 culvert (UTM 616126, 4785690). This is also proposed critical habitat and is off the Antelope allotment. Fresh tracks and muddy water show cattle were recently at this pool. Possibly the same herd that was upstream near the allotment boundary fence in lower Jamison earlier in the day. As you can see, this pool is also down to the final inches of water……Thank you, Terry"

Photo 3. Jack Creek, Fremont-Winema National Forest, Oregon. Unauthorized cattle have trampled, watered, and urinated at these Oregon spotted frog occupied isolated pools. Cattle are not administratively ”permitted” to be at this location but unauthorized livestock damage is severe every year that an Antelope Allotment grazing permit is issued. Photo by T. Simpson on September 1, 2013; UTM 0615594, 4786101.

d. Terry Simpson reported the following unauthorized cattle grazing along Jack Creek (Fremont-Winema National Forest) in an email dated September 14,2013 that was sent to appropriate Forest Service staff :

“There were cattle off the [Antelope] allotment at Yellowjacket this morning. They never came out of the trees, so I couldn't say how many. UTM617087, 4781510. There were also cattle in Davis Flat this morning. The first picture shows the red cow with the black calf like described in last week's sighting. Today I also saw 4 pairs of cattle behind the Jack Creek Riparian (frog) fence just upstream from the Jamison headcuts (UTM613067, 4787610). See second picture. There was also a small herd of cattle (couldn't see how many were in the trees) behind the Jack Creek Riparian (frog) fence about a half mile upstream of the headcuts today (UTM 612322, 4787754). These were up in the side meadow. Terry”

e. Terry Simpson reported the following trespass grazing in an email dated October 23, 2013 to Freemont- Winema Forest staff.

“Good morning xxxxx. You asked a couple months ago if I ever saw a cow step on a frog and I told you about seeing dead frogs where cattle watered. On October 5, 2013, Jayne and I saw 4 unauthorized [trepass] Iverson brand cattle in lower Jamison between the Iverson private fence and the allotment boundary fence. They were about 150 yards from the small frog pool where I had reported the 18 spotted frogs in August. There were fresh cow tracks that waded into and across the pool with mud just starting to settle in the pool. I also saw a dead juvenile spotted frog floating in a hoofprint on the pools edge and another live juvenile toward the middle of the pool about 20" away. (UTM 0615594, 4786101). You can clearly see the frog in the hoofprint in the attached pic. Waterbugs were just starting to chew the dead juv up. They made short work of the meal.”

Photo 4. Dead Jack Creek juvenile Oregon spotted frog in cow hoof print at lower Jamison Pasture, Fremont-Winema National Forest, Oregon. Mortality was associated with concurrent observations of trespass cattle. Photo by Terry Simpson on 5 Oct 2013 UTM 0615594, 4786101

4. **We object to assertions of “potential benefits” to Oregon spotted frogs from grazing in the EA and BE because new information in the proposed listing of Oregon spotted frogs and new information about adverse effects of short duration (trespass) grazing during 2013 indicate that grazing is clearly not appropriate as a conservation measure for Jack Creek Oregon spotted frogs. Grazing has no documented benefits for Jack Creek and adverse impacts are well documented.**

The EA:82 falsely states that “[g]razing on Jack Creek may benefit OSF by helping to maintain the early seral stages in the vegetative structure and by removing biomass from oviposition sites (White 2002). With no grazing within 167 acres of OSF habitat, there would be no potential benefit by the removal of biomass from oviposition sites.” The Proposed Listing for Oregon Spotted frogs (78FR53597) states “Studies conducted in Washington (White 2002, pp. 45–46; Pearl and Hayes 2004, pp. 22–23) demonstrated that the quality of breeding habitats for Oregon spotted frogs is improved by reducing the height of the previous years’ emergent vegetation (i.e., reed canarygrass in these cases).” Further discussion of this issue in the Proposed Listing indicates that benefits from

grazing are limited to sites where reed canarygrass has become dominant in breeding areas. **Reed canary grass does not occur at Jack Creek oviposition sites, thus, the findings of White 2002 do not apply and are taken out of context in the EA.**

Furthermore, it is now believed that winter snowpack provides compression of grasses and grazing is unnecessary where snowpack occurs. There is no documented need to "remove biomass" with cattle grazing on Jack Creek. The Proposed Listing for Oregon Spotted frogs (78FR53600) states:

"Cattle grazing ceased at Trout Lake NAP in Washington after a monitoring study showed no apparent positive effect on the Oregon spotted frog population trends (Wilderman and Hallock 2004, p. 10), indicating that either grazing was not an effective tool for reed canarygrass management at this location, or that perhaps reed canarygrass was not as threatening to breeding frogs at this location as previously thought. This may be because winter snow pack compresses the reed canarygrass, leaving none of the previous season's vertical stems available to Oregon spotted frogs during the breeding season. The observed negative consequences of grazing, while perhaps acceptable if there was clear benefit to the Oregon spotted frog populations, were not compatible with other site management goals and posed a limitation to future restoration on the site (Wilderman and Hallock 2004, p.14). (emphasis added)

Cattle grazing to remove biomass at Jack Creek is unwarranted because as stated above **winter snow pack compresses the grass biomass making grass removal by livestock unnecessary at high elevation sites such as Jack Creek.**

Jack Creek Spotted Frog Site Management Plan (11/28/2011)

5. **We object to the use of the Oregon Spotted Frog Site Management Plan (dated November 28, 2011) as a basis for grazing Oregon spotted frog habitat with alternatives 3 and 5. New information in the proposed listing of Oregon spotted frogs and new information about short period (trespass) grazing during 2013 indicate that this grazing strategy is not appropriate as a conservation measure for Jack Creek Oregon spotted frogs. Grazing suggested in the SMP would cause considerable harm and likely contribute to the extirpation of the Jack Creek population. Appendix B in the SMP must be removed and proposed short duration grazing in Oregon spotted frog habitat abandoned. We object to the Forest Service failure to request US Fish and Wildlife Service assistance with development of the SMP.**

The EA:86 states that "[I]n Alternatives 3 and 5, grazing management would incorporate the recommendations in the Jack Creek Oregon Spotted Frog Site Management Plan (Gervais 2011) on both NFS and private lands as summarized below. More detail is provided in the Jack Creek Oregon Spotted Frog Site Management Plan which is incorporated by reference." The scientific basis for recommended grazing in the SMP and EA has been disproven with new information. Contrary to what is asserted in the SMP and EA, Alternatives 3 and 5 would have no benefits to Oregon spotted frogs and would be certain to cause habitat degradation and direct mortality as explained below.

The Site Management Plan p.1 states that "SMPs should be updated as new scientific information becomes available, and this plan may be changed or modified based on new information in the

future." Significant new scientific information is now available from 1) the proposed listing of Oregon spotted frogs (USFWS 2013a ; 2) proposed critical habitat (USFWS 2013b); 3) new sighting of Oregon spotted frogs several miles below distribution recognized in SMP; and 4) documentation of significant impacts to Oregon spotted frogs with short duration (albeit trespass) grazing during summer 2013. The defective Site Management Plan must be updated to include new information that indicates there is no benefit to Oregon spotted frogs from short duration grazing on Jack Creek. Livestock use of dwindling open water areas on Jack Creek causes serious conflicts, habitat degradation, and even direct mortality to Oregon spotted frogs (Photos 3,4).

The SMP p/34 states that " [g]razing is a historical use of this site, and may benefit *R. pretiosa* by helping to maintain the early seral stages in the vegetative structure and by removing biomass from oviposition sites (White 2002). The Proposed Listing for Oregon Spotted frogs (78FR53597) states "Studies conducted in Washington (White 2002, pp. 45–46; Pearl and Hayes 2004, pp. 22–23) demonstrated that the quality of breeding habitats for Oregon spotted frogs is improved by reducing the height of the previous years' emergent vegetation (i.e., reed canarygrass in these cases)." Further discussion of this issue in the Proposed Listing indicates that benefits from grazing are limited to sites where reed canary grass has become dominant in breeding areas. **Reed canarygrass does not occur in Jack Creek at oviposition sites, thus, the findings of White 2002 do not apply to Jack Creek and are taken out of context in the SMP.**

The SMP p. 35 states that "[o]nce habitat conditions have been restored particularly in Lower Jack and Upper Jamison Meadow, limited grazing may be reintroduced in these meadows, but as part of a carefully designed and controlled experiment to determine optimum duration and intensity that would remove biomass without damaging the creek banks or other sensitive areas" The SMP is wrong. There is no documented need or scientific basis to "remove biomass" with cattle grazing on Jack Creek. The Proposed Listing for Oregon Spotted frogs (78FR53600) states:

> "Cattle grazing ceased at Trout Lake NAP in Washington after a monitoring study showed no apparent positive effect on the Oregon spotted frog population trends (Wilderman and Hallock 2004, p. 10), indicating that either grazing was not an effective tool for reed canarygrass management at this location, or that perhaps reed canarygrass was not as threatening to breeding frogs at this location as previously thought. This may be because winter snow pack compresses the reed canarygrass, leaving none of the previous season's vertical stems available to Oregon spotted frogs during the breeding season. The observed negative consequences of grazing, while perhaps acceptable if there was clear benefit to the Oregon spotted frog populations, were not compatible with other site management goals and posed a limitation to future restoration on the site (Wilderman and Hallock 2004, p.14). (emphasis added)

Cattle grazing to remove biomass at Jack Creek is unwarranted because as stated above **winter snow pack compresses the grass biomass at Jack Creek making removal by livestock unnecessary.**

The SMP p. 34 states that "[c]areful, targeted monitoring would allow the evaluation of the relationships between cattle grazing and *R. pretiosa* demographics and habitat." Observations this summer of trespass grazing (that mimics short duration grazing) found serious impacts to Oregon

spotted frogs as cattle degraded small open water areas where Oregon spotted frogs were concentrated. Water quality and habitat was degraded and at least one direct mortality (Photos 3,4).

Due to the precarious status of Jack Creek Oregon spotted frogs it would be unethical and likely illegal to repeat "adaptive management" grazing along Jack Creek where Oregon spotted frogs eke out a tenuous survival during late summer drought periods. The unacceptable consequences of short duration grazing have been adequately documented in 2013. Alternative 3 and 5 grazing in spotted frog habitat must be abandoned. **There is no point in implementing short duration grazing in Jack Creek Oregon spotted frog habitat with Alternatives 3 and 5 as it will simply kill more frogs with no benefits.**

There is no field data from Jack Creek to support the repeated EA assertion that grazing improves oviposition sites. Field observations indicate that desiccation of egg masses from rapidly receding water levels is the major limiting factor with respect to oviposition.

The US Fish and Wildlife Service have the authority to enter into agreements with private land owners to recover threatened species and do not have a mandate to promote livestock grazing. Due to proposed listing, the Forest Service needs to at least begin informal conferencing with the US Fish and Wildlife service and revise the Jack Creek Site Management Plan to place needed emphasis on implementing critical habitat projects. Grazing schemes in spotted frog habitat that ultimately hinder recovery must be eliminated.

The Forest Service arbitrarily created a foregone conclusion to reject alternatives with reduced cattle numbers or reduced distribution by first establishing the desired AMP private grazing into the Jack Creek Site Management Plan. The SMP grazing proposal had the effect of truncating decision choices between alternative 3 and alternative 5, since these are the only alternatives that "comply" with the Site Management Plan. The Jack Creek Site Management Plan failed to identify actual trade-offs being made (e.g. delays in needed pond habitat projects on public lands, retaining or increasing large herd size, increased duration of grazing). The grazing schemes developed in the Site Management Plan would benefit the permittee at the expense of the spotted frog and needed open water habitat restoration identified by US Fish and Wildlife Service.

The US Fish and Wildlife Service comment on the August 2012 EA supports our objections to Alternatives 3 and 5 : "*It is not clear which alternative is most beneficial to the conservation of Oregon spotted frogs and appears that parts of all 5 alternatives could be the decision. Would like to see actions that improve and retain the breeding; rearing; overwintering and dispersal functions of occupied and potential habitat for the frog in the Jack Creek watershed. Would like to see the creation and retention of open water habitat for frog breeding and rearing habitat; retention of early seral vegetation to provide full solar exposure; and protection of springs and fens associated with Jack Creek to provide adequate water quality."*

The Site Management plan was reviewed by Terry Simpson (November 2011) and found to have many factual errors as well as disputed scientific opinion. The EA failed to identify differing expert opinion about facts and assertions in the Jack Creek Oregon Spotted Frog Site Management Plan that were carried forward to support controversial reintroduction of grazing into spotted frog exclosures. Attached is a pdf with full summary of comments made by Terry Simpson about errors of fact and opinion in the Site Management Plan. These comments made

by Terry Simpson about the Spotted Frog Management Plan must be addressed as substantive comment to the EA because they question the scientific validity of a major supporting document for grazing in riparian exclosures (alternative 3 and 5). The Site Management Plan erroneously leads the public and decision maker into believing that alternative 3 and 5 were the best choices for spotted frogs when there is considerable scientific controversy about authorizing livestock grazing along Jack Creek.

US Fish and Wildlife as Cooperating Expert Agency

6. **We object to the Forest Service failure to seek assistance from the Fish and Wildlife Service about alternative development for this project and failure to initiate conferencing with the Fish and Wildlife Service since the proposed listing in August 2013.**

A letter dated November 7, 2012 from L. Sada (USDI Fish and Wildlife Service) to G. Westlund (Fremont-Winema National Forest) states the following:

> "We appreciate the opportunity to comment on the five alternatives presented in the [August 2012] EA. We have been interested in the progress of his project since its initiation in 2008. However, our last communication with you regarding this project was in 2010. It is unfortunate that our office was not involved in the development of alternatives for this project because we could have assisted the Forest up front in developing alternatives that address the conservation needs of the species noted above. Since it is unclear to us which alternative is most beneficial to the conservation of the Oregon spotted frog (frog) on Jack Creek and it appears parts of any of these five alternatives could be included in the Decision Record, we offer you the following comments. We would like to see actions that improve and retain the breeding, rearing, overwintering, and dispersal functions of occupied and potential habitat for the frog in the Jack Creek watershed. Specifically we would like to see creation and retention of open water habitats for frog breeding and rearing habitat, retention of early seral vegetation to provide full solar exposure for breeding and rearing habitat, and the protection of springs and fens associated with Jack Creek to provide adequate water quality. We encourage you to contact our office to discuss the improvement and retention of these biological features.
>
> It is our understanding that you do not intend to conference on this proposed project at this time. However we encourage you to re-consider this decision in an effort to streamline future Section 7(a)2 processes and prevent disruption of permit implementation should the frog be listed and critical habitat be designated at a later date. In the event that your position changes, please contact Tia Adams of my office to initiate discussion to determine if conferencing under the Section 7(a)(2) of the ESA is appropriate for this project regarding spotted frogs."

We are hopeful that new managers at the Fremont-Winema Forest Service will choose to engage in informal conferencing with the Fish and Wildlife Service to provide additional independent expert information to guide decision making and improve the scientific credibility of the EA. The EA badly informs decisions because the Forest Service BE has not been adequately updated with new information and the EA lacks findings and recommendations from conferencing with the Fish and Wildlife Service.

Forest Service private land "term agreements" are not intended to recover species threatened with extinction. The US Fish and Wildlife was not adequately involved with the development of the Site Management Plan and subsequent development of grazing alternatives. The US Fish and Wildlife Service is the logical agency for the Forest Service to have discussed EA alternative development. Unfortunately they did not obtain technical assistance. Since the proposed frog listing in August 2013, it would seem prudent for the Forest Service to conference with the Fish and Wildlife Service about protection and mitigation requirements but they have not done so.

The Winema Forest Plan (p. 4-47) states: **"**If endangered, threatened, or proposed species are found in a project area, consultation requirements with the USDI Fish and Wildlife Service shall be met in accordance with the Endangered Species Act (Public Law 93-205). Before a project can be carried out, protection or mitigation requirements shall be specified (NFMA, 36 CFR 219.27[a][8])."

The Winema Forest Plan.4-67 S&G 9-19 states: "Allotment management planning, an interdisciplinary process, shall provide for cost-effective management of range vegetation consistent with land stewardship practices Planning shall involve grazing permittees, other range users, interested publics, **and other agencies.** As AMPs are written and updated, management emphasis shall be the intensification of vegetation management and forage utilization consistent with other resource objectives. The emphasis also shall be on cost-effectives administration."

Alternative Development

7. **We object to alternatives 2, 3 and 5 and the Jack Creek Spotted Frog Site Management Plan because they failed to consider accomplishing resource objectives by reducing cattle numbers and reducing grazing duration rather than increasing the area grazed and increasing grazing duration. We object to the failure of the EA to adequately disclose the impact or reason for increasing cattle numbers from alternative 2 (419cow/calf) to Alternative 5 (494cow/calf) and increasing the duration of grazing by 2 weeks into mid October.**

The Forest Service failed to analyze grazing systems with reduced numbers to achieve flexibility (S&G 9-19 below) as an alternative to increasing the area grazed in alternatives 3 and 5. Trade-offs between reduced impacts with reduced numbers of cattle and increasing the area impacted with the same numbers of cattle were not evaluated in the EA. Assertions

that reduced cattle numbers is somehow analyzed with the no grazing alternative are wrong due to extreme differences of grazing intensity. It would seem prudent to reduce livestock numbers/aums because of reduced forage due to chronic drought, conifer encroachment and large areas of Riparian Management Area 8 in poor or fair condition and not meeting Forest Standards. In addition the permittee cannot control the large herd. Trespass grazing is chronic and damaging.

Allotment Management Planning (Forest Plan 4-67)

9-19 Livestock stocking levels shall be determined by range analysis considerations, including: (1)forage condition, suitability, and availability; (2) other resource needs as shown in 9-7 above; (3) permittee's ability to self-monitor management and maintenance in project allotment plans; and (4) economic factors, including development and maintenance of facilities.

Adaptive Management Alternatives and Monitoring

8. **We object to Alternatives 3 and 5 because they fail to provide for: 1) adequate monitoring of sensitive species, 2) adequate monitoring and prevention of Riparian Management Area 8 degradation, 3) adequate integration with Jack Creek Site Management Plan, 4) specific course of action to reduce grazing intensity in fair and poor condition fens and 5)a schedule for improvement. Implementation and Effectiveness monitoring allows for unacceptable damage to Riparian Management Areas and loss of sensitive species contrary to the Forest Plan and Adaptive Management guidance.**

The Forest Service Handbook (92.23b - Adaptive Management p. 8) states:
"2. Adaptive management utilizes the interdisciplinary planning and implementation process that provides:
a. Identification of site-specific desired conditions;
b. Definition of appropriate decision criteria (constraints) to guide management;
c. Identification of pre-determined optional courses of action, as part of a proposed action to be used to make adjustments in management over time, and
d. Establishment of carefully focused project monitoring to be used to make adjustments in management over time."

A. Site Specific Desired Conditions and Monitoring to make adjustments over time.

1. Willow and Aspen (Riparian Management Area 8)

Willow cover, willow reproduction, and willow restoration is not identified for monitoring along Jack Creek riparian reaches with quantitative methods where beaver are desired to build dams. Coordination of willow monitoring with wildlife biologist is not evident, especially in areas where willow restoration is planned with Jack Creek Site Management Plan. The EA suggests beaver may exhaust existing forage supplies in a few years, which makes management for willow a high priority. Effectiveness monitoring to provide for increased willow production along Jack Creek is needed.

Anticipated grazing of willow to Forest Plan standards (30% p. 4-63) is too high when beaver needs are in conflict with livestock use (Ott and Johnson 2005). Late season livestock use into October will exacerbate shortage of willow needed by beaver and make restoration of aspen difficult.

2. Wet Meadow Riparian Fens and Stream Riparian areas (Management Areas 8A and 8C)

a. Existing and potential vegetation

The Winema National Forest Plan Standard and Guideline 9-23 for **Allotment Management Planning** (p. 4-67) states:

> "Allotment management plans for range shall include a strategy for managing riparian areas for a mix of resource uses. A measurable desired future riparian condition shall be established based on existing and potential vegetative conditions. When the current riparian condition is less than that desired, objectives shall include a schedule for improvement. The allotment management plans shall identify management actions needed to meet riparian objectives within the specified time frame. Measurable objectives shall be set for key parameters, such as shaded stream surface, stream bank stability, and shrub cover. This process is described in "Managing Riparian Ecosystems (zones) for Fish and Wildlife in Eastern Oregon and Eastern Washington' (1979). The plan shall address the monitoring needed to determine if the desired rate of improvement is occurring. Allotment management plans currently not consistent with this direction will be developed or revised on a priority basis under a schedule established by the Forest Supervisor"

The EA Implementation Monitoring in Fens (Appendix G-7) errs by providing only the desired future riparian soil condition for all wet meadow riparian fens ("A desired future condition of less than 10% bare soil was established for maintaining fen habitats in the project area."). This standard is a soil and water "desired future condition" from the Forest Plan (4-137):

"2. The cumulative total area of detrimental soil conditions in riparian areas shall not exceed **10** percent of the total riparian acreage within an activity area. Detrimental soil conditions include compaction, displacement, puddling, and moderately or severely burned soil."

While this desired future condition for soil is useful, the more appropriate and comprehensive standard and guidelines are found in the **Allotment Management Planning** section of the Forest Plan 4-67. The appropriate Standard and Guideline for AMP planning for riparian condition is S&G 9-23. Allotment Management Planning Standard and Guideline 9-23 provides that both the existing and desired future riparian condition for each wet meadow riparian fen be identified. The 10% desired future condition for soil is a generic "one size fits all" and must be used in conjunction with S&G 9-23 for Allotment Management Planning. The 10% soil degradation standard as a stand alone desired future riparian condition creates a grazing loophole for degrading good condition riparian fens with low bare ground <10% and fails to provide a schedule for improvement of poor condition riparian fens.

Allotment Management Planning with S&G 9-23 would indicate both existing and desired future condition with a timeline as illustrated with the following examples:

"Existing bare ground in 2011 at riparian fen 45 was 18% and the future riparian condition will be improved to <10% bare ground by 2018 with grazing exclusion."

"Existing bare ground in 2011 at riparian fen 34 was 4% and the future riparian condition will be maintained at 4% or less bare ground in 2016 with deferred grazing."

These examples conform to S&G 9-23 and eliminates "bare ground" loophole for degrading "good" fen 34 to >10% bare ground and eliminates loophole to let fen 45 languish indefinitely as poor. The examples are also consistent with "maintain or improve" Forest Plan requirements and Adaptive Management. While all Standards and Guidelines apply, the current AMP project must focus on Forest Plan Allotment Management Planning S&Gs which were intended for this process.

Streamside riparian vegetation also needs monitoring and management. The EA fails to adequately describe the existing riparian vegetative condition or the potential riparian vegetative condition. For example, the existing condition of woody riparian vegetation such as willow within proposed grazing units is not adequately described or quantified (e.g. percent cover). Potential vegetation along Jack Creek likely included aspen at one time but there is no mention of aspen as being a component of desired future riparian condition. Both of these species are important. Willow provides streambank stability and beaver are dependent on both of these species for food and materials for dam construction. There is no discussion of plant species that may have been lost from specific riparian areas or what riparian conditions would be present if the riparian areas had never been grazed with domestic livestock (i.e. potential vegetation).

b. Require 4 inch stubble height in Riparian Management Areas .

The Monitoring Plan fails to identify a 4 inch stubble height for Riparian Management Area 8. Stubble height is identified in Monitoring Plan (p.6) but a 4 inch standard is not identified for monitoring. The monitoring plan inappropriately focuses on a damage standard/criteria (10% bare soil damage) in fens and associated riparian areas when a protection standard/criteria is clearly stated in the Forest Plan. The Winema Forest Plan 4-137 states, "*Where stream banks or channels are highly erodible, the stubble height at the end of the grazing period shall exceed 4 inches. Under extreme conditions, the area may need permanent protection or removal of grazing for long periods (Clary and Webster 1989).*"

A previous Forest Service response to KSWild comment stated that "[*g]rass is an important stabilizer in meadow systems."* Many riparian areas and meadows experience intense overland flow during spring snowmelt and are vulnerable to erosion. "Scour holes" have been observed in riparian areas that have been heavily grazed to bare ground the previous season (Photo 16). These scour holes contribute to detrimental soil conditions and are at risk for future gullying. Adhering to Forest Plan Standard that Riparian Management Area 8 stubble heights exceed 4 inches would provide needed "roughness" to minimize soil erosion from overland flow during annual spring floods that spread out over meadows. Grazing to achieve a "damage" standard (10% bare soil) is not consistent with adaptive management when a protection standard is available and likely more effective to achieve improved riparian condition .

c. Establish riparian stubble height based on riparian forage utilization standards in Winema Forest Plan.

The Monitoring Plan Appendix G and EA fail to identify a stubble height for riparian areas as required in Range Standard and Guideline 9-3 : *In riparian areas, management practices shall provide for regrowth of riparian plants after use or shall leave sufficient vegetation at the time of grazing for maintenance of plant vigor and stream bank protection. See table 4-16. Allowable use is expressed as biomass, but will be monitored as stubble height by developing stubble height weight biomass conversion tables.* Forest Plan 4-63.

TABLE 4-16
Riparian Forage Utilization
Allowable Use of Available Forage(1)

	Maximum Annual Utilization (Percent)			
	Grass and Grasslike(2)		Shrubs(3)	
Range Resource Management Level	Satisfactory Condition(4)	Unsatisfactory Condition(4)	Satisfactory Condition	Unsatisfactory Condition
B - Livestock use managed within current grazing capacity by riding, herding, and salting, and cost-effective improvements used only to maintain stewardship of range	40	0-30	30	0-25
C - Livestock managed to achieve full utilization of allocated forage. Management systems designed to obtain distribution and to maintain plant vigor include fencing and water development	45	0-35	40	0-30
D - Livestock managed to optimize forage production and utilization Cost-effective culture practices improving supply, forage use, and livestock distribution may be combined with fencing and water development to implement complex grazing systems.	50	0-40	50	0-35

(1) This will be incorporated in allotment management plans Allotment management plans may include utilization standards which are either lower or rarely higher when associated with intensive grazing systems and specific vegetation management objectives that will meet objectives for the riparian-dependent resources Includes cumulative annual use by big game and livestock
(2) Utilization based on percent removed by weight.
(3) Utilization based on incidence of use, weight, and/or twig length. Example. If 50 leaders out of 100 are browsed, utilization is 50 percent
(4) Glossary has definitions of satisfactory and unsatisfactory range conditions

d. Maintain existing good vegetative cover and desirable soil condition in riparian areas.

The Winema Forest Plan 4-136 states "*Existing conditions will be maintained or enhanced"* and p.4-141 states "*Maintain or improve meadow condition and prevent gulling or dropped wader tables.*" The Monitoring Plan (p.6) provides for a 10% bare soil (detrimental soil condition) standard for fens. Managing for this standard alone violates the Winema Plan because it would allow some fens that have no bare soil or minor amounts of bare soil to be damaged with increased amounts of bare soil. Increased bare soil increases risks to sensitive species and increases risks for gullying. The Forest Plan did not intend for fens and riparian areas with minor amounts of detrimental soil conditions to have <u>downward trend</u> towards the 10% bare soil condition.

e. Detrimental soil conditions is more than measuring bare soil.

The bare soil criteria in the Monitoring Plan is not consistent with "detrimental soil conditions" as described in the Winema Plan (p. 4-137): "Detrimental soil conditions include compaction, displacement, puddling, and moderately or severely burned soil." Pedastalling and post-holing would also be detrimental soil conditions. The Winema Plan:4-141 states *"Maintain or improve meadow condition and prevent gulling or dropped wader tables."* The monitoring measurements in fens must include all detrimental soil conditions and not be limited to "bare soil".

f. Baseline (existing) vegetative and soil conditions must be maintained with quantitative data. Cattle must not be turned out into fens where saturated soils causes increases in bare soil.

The monitoring plan Appendix G must state that current detrimental soil conditions (bare soil compaction, displacement, puddling, burned soil, gullying) and hydrologic conditions (water table characteristics) must be first established as base line conditions and that grazing will not be allowed to cause measureable increases in detrimental soil conditions or adverse deterioration of water table. This is an anti-degradation standard commonly used for maintaining high water quality in wetlands (e.g. fens, streams). Grazing cannot be allowed to degrade existing riparian conditions as this would be counter to Forest Plan requirements. Implementation Monitoring in Appendix G-8 and Botany report suggests that annual grazing creation of "bare ground' will be used to determine allowable maximum use rather than forage utilization. Bare ground 10% standard is generally exceeded from trampling before the 50% vegetation utilization standard is reached. This strongly suggests that these fens are being grazed prior to soil range readiness.

g. Monitoring frequency must detect short term changes in trend to prevent irreversible losses.

The Winema Forest Plan Standard and Guideline 9-23(p. 4-67) states that *"[t]he [allotment management] plan shall address the monitoring needed to determine if the desired rate of improvement is occurring".* Currently the Monitoring Plan only assesses trend every 3- 5 years and would allow bare soil to increase within qualitative condition classes (good condition fens could deteriorate within the condition class or even drop to poor). A fen with <1% bare soil would be allowed to increase to 9% bare soil with the trend standard described in Monitoring Plan (p.9.) This means irreversible impacts may occur before action is taken and recovery may not be possible. The 10% standard for fen "bare ground" is not scientifically credible for maintaining fens in good condition. At or near the allowed 10% detrimental soil disturbance, the fen can easily slip into fair category. Any measurable increase in "bare ground" means that the Riparian standard has been violated whether it's from a single season or several seasons of us.

h. All Riparian Management 8 Areas that are grazed must be monitored.

The monitoring plan fails to monitor all fens and has no systematic monitoring for non-fen riparian areas. The monitoring plan indicates that only the higher value (larger) fen habitats will be monitored. The Monitoring Plan will monitor higher value fens but will graze all fens (many smaller fens have not been inventoried) and graze non-fen riparian management areas. Arbitrarily limiting monitoring to high value fens is contrary to Forest Plan guidelines for Riparian Management Areas and Adaptive Management. Each fen or riparian management "activity area" must be delineated during project development and monitored to establish quantitative baseline conditions with regard to detrimental soil conditions and status of the water table. Each fen and non-fen riparian management area would have an existing condition and a desirable future condition with regard to bare soil Each fen is a distinct Riparian Management Area that is identified during project level planning (Winema Plan4-136). Each fen and non-fen riparian area is vulnerable to degradation as documented in Botany

Biological Evaluation Report (Table A-3) and the EA. We assert that proposing grazing in riparian meadows means that there must be monitoring of condition and trend.

i. Alternatives 2,3,5 and Implementation Monitoring fail to reduce grazing intensity on well-known fen and riparian overuse areas.

The Forest Service Handbook (92.23b - Adaptive Management p. 10) states: "*The key to development of adaptive management actions is to focus on factors that are essential to ensure management objectives are met*." Reduced grazing intensity is not being implemented where it is needed the most. The EA p.3-150 states "*During the [2011] spring and fen surveys, eight fens were determined to be in poor condition; all but 1 of these fens were located outside of ungrazed fenced riparian areas. Eleven of the surveyed fens were within ungrazed fenced riparian areas; ten of these were determined to be in good condition.* ***The majority of fens that were observed to be in poor condition were located in the southeast corner of the Chemult pasture near the entry/exit gate for the pasture.****"* (Emphasis added) Neither the Modified Preferred Action nor the Monitoring Plan places an emphasis on this obvious area of overgrazing causing riparian damage. A credible "adaptive management" strategy would recognize this important observation about unacceptable impacts being located in an area where the cows are turned out each year, however, neither the grazing schedule (OI) or Alternatives indicate changes to prevent continued damaging use in these fens. We want to know why the Annual Operating Instructions for 2013 did not make changes as to where, when, and how many cattle are turned out to the Chemult Pasture.to effectively reduce local grazing intensity on fens.

j. <u>Jack Creek</u>

No turnout date is acceptable for Jack Creek because of high risk of spotted frog trampling mortalities (Photo 4). The Forest Service has not demonstrated that there is a surplus of spotted frogs that can be wasted to facilitate livestock grazing anywhere on Jack Creek.

Identification and monitoring criteria for each Jack Creek stream reach was not provided as required in Forest Plan. The monitoring plan fails to provide for up-to-date stream surveys on federal and private land reaches. Hydrologic cross sections, while useful, are not likely to show much change unless located near active headcutting. Even if cross sections do show change, the monitoring plan does not state what measured criteria would create the need for livestock exclusion. Head cutting, gullies, and trailing impacts need to be listed as a monitoring parameter for some or all Jack Creek stream reaches. Linear transects or reaches with existing streambank damage need to be <u>measured</u> for percent damage annually in the fall. "Ocular estimates" are not reliable. The depths of deepest 5 pools could be measured in the fall. Average annual depth in several critical reaches would provide quantitative trend data.

k. The EA lacks Forest Plan requirement to coordinate monitoring of fish and wildlife that are in conflict with proposed livestock grazing with alternatives 2,3, and 5. The EA lacks specific monitoring for fish and wildlife in conflict with livestock grazing.

Appendix G-1 states the following:

> ***On-Going Monitoring***
> Separate from this analysis, monitoring within the project area would continue as planned for resource areas. This includes, but is not limited to, existing monitoring schedules for Jack Creek (Level II Stream Habitat Surveys and water

quality monitoring) and the Oregon spotted frog egg mass surveys on Jack Creek. These surveys as well as others on-going monitoring are supported to be continued by this analysis, but ultimate determinations of timing, frequency, and duration are the decision of the corresponding program areas and are not part of this decision to be made.

This statement is contrary to Forest Plan Standard and Guideline 9-20 which stipulates Allotment Planning will have "Coordination requirements with **other resource operations shall include**: (1) threatened, endangered, and Sensitive plant and animal species; (2) riparian area conflicts; (3) livestock and wildlife conflicts;" (emphasis added)

The Forest Service failed to coordinate range with wildlife to provide an adequate monitoring plan in the EA for Oregon spotted frog, Miller lake lamprey and Jack Creek stream habitat on which these species depend. The Forest Service failed to conduct up to date stream surveys for Miller Lake lamprey and its prey species. The Forest Service failed to make an up to date survey of Jack Creek for spotted frogs and spotted frog habitat. Alternatives 2,3 and 5 are based on incomplete, outdated, or erroneous fish and wildlife information. For example, the EA erroneously assumes no frogs or frog habitat in North Sheep pasture (Photo 1, Map 1) and erroneously assumed no impact from short duration grazing (Photos 3,4).

B. Adaptive management requires "definition of appropriate decision criteria (constraints) to guide management". Grazing management changes are not being incorporated into Annual Operating Instructions to address known unacceptable conditions of fens in the southeast portion of the Chemult Pasture.

"Decision criteria" are not explicitly stated in the Monitoring Plan or Alternatives 3 and5 as required by the Forest Service Handbook. (92.23b - Adaptive Management (p. 8). The Monitoring Plan provides a column header: "variability indicating action." This does not meet the requirement for "decision criteria".

The Forest Service Handbook (92.23b - Adaptive Management p. 10) states: "*The key to development of adaptive management actions is to focus on factors that are essential to ensure management objectives are met."* As explained previously data in the EA (p.150) already indicates that fens in poor condition *"were located in the southeast corner of the Chemult pasture near the entry/exit gate for the pasture."* Poor condition fens should have produced an adaptive management response for the 2013 Annual Operating Instructions but none is described in the EA. It appears that "Adaptive Management" is being misused in this allotment as a technique to delay instead of implement needed management actions to improve riparian management areas as required in the Forest Plan.

Also, as explained previously, quantitative measurements of detrimental soil damage are needed in all fens to detect downward trend that would not meet Forest Plan standard to "maintain" Riparian Areas. The Monitoring Plan appears to allow a fen with <1% bare soil be damaged by livestock grazing to 10% with no intervention. Decision criteria need to be developed that do not allow any measureable decline in fen or riparian management area 8 quality (i.e. measurable downward trend).

C. Adaptive management provides for "*identification of pre-determined optional courses of action, as part of a proposed action to be used to make adjustments in*

management over time." **The Monitoring Plan Appendix G allows grazing to exceed Forest Plan standards before action is taken. Implementation will not maintain fen habitat quality. Cattle safety is not considered.**

The Monitoring Plan G-8 " Monitoring and Adaptive Management" does not meet Forest Plan standards because it allows for riparian area damage to continue beyond Forest Plan standards. Fourteen fens that are fair or poor condition and do not meet forest plan standards because detrimental soil conditions already exceed 10% (Botany Biological Evaluation Table A-3). The Winema National Forest Plan Standard and Guideline 9-23(p. 4-67) states that *"[t]he allotment management plans shall identify management actions needed to meet riparian objectives within the specified time frame*." Neither the Monitoring Plan nor Alternatives 2,3,or 5 provide site specific management action that would improve these damaged areas to good condition by a specified date. . Additionally, Annual Operating Instructions would need to provide that "livestock will be removed from the vicinity of the fen" when existing data show the fen is in fair or poor condition and not meeting forest plan standards." No such actions appear to have been made in 2013 and it must be assumed these fens continue in poor condition with downward trend, It appears that "Adaptive Management" as implemented in this allotment is merely a paper exercise with no substantive changes to reduce known grazing damage to riparian management areas.

The monitoring plan fails to implement "adaptive management" to immediately reduce a known undesirable condition (>10% bare soil). Instead the Monitoring Plan G-8 would allow up to 4 or more fens in the "greater" Chemult Pasture to continue to exceed the 10% bare soil standard before removing livestock from the pasture for the remainder of the season. Monitoring Plan G-7 states: "*In the greater Chemult Pasture: livestock will be removed from the vicinity of the fen if 5 or more fens distributed throughout the pasture exceed the standard, livestock will be removed from the pasture for the remainder of the grazing season."* Grazing in the Jack Creek unit would allow Fen 19a (8802 N, Middle Jack) to exceed the 10% bare soil before actions would be taken to remove livestock. Similarly, "*In the North Sheep Pasture: livestock will be removed from the vicinity of the fen. If 3 or more fens distributed throughout the pasture exceed the standard, livestock will be removed from the pasture for the remainder of the grazing season."* The Monitoring Plan prescribes allowable riparian area degradation on up to 7 fens contrary to the Forest Plan.

The Implementation Monitoring in Fens (App G-7) allows for soil damage to exceed 10% in several fens in a pasture during the course of a season. The damage would most likely be trampling damage in moist areas that persists for decades as pedastaling. This clearly demonstrates that range readiness for soil was not implemented properly as a restriction for turn out. If the soils in these fens were actually "range ready" they would not be vulnerable to soil damage exceeding 10% of the area. Fens, especially small fens are simply not suitable for livestock grazing. Unfortunately the smaller "low value" fens are not scheduled for monitoring and appear to be sacrifice areas to cattle grazing. An AMP that dismisses poor condition small riparian fens is entirely contrary to Forest Plan requirements to maintain or improve riparian management areas. There is no size or quality exemption for riparian management areas in the Forest Plan, all must be managed to maintain or improve condition.

D. The monitoring plan lacks the required "schedule" improving specific riparian management areas.. The desired improved riparian condition is uncertain with deferred grazing or high intensity grazing. Monitoring condition every 5 years is inadequate.

The Winema National Forest Plan Standard and Guideline 9-23 for **Allotment Management Planning** (p. 4-67) states that *"[w]hen the current riparian condition is less than that desired, objectives shall include a schedule for improvement".* Neither the Modified Preferred Alternative nor the Monitoring Plan provides a "schedule for improvement". The EA and the Monitoring Plan suggest that each year fens will be degraded with increased bare soil and expected to "recover" in time for next year's grazing degradation. No timeline, i.e. schedule, is given as to when each monitored fen or riparian areas currently not meeting Forest Standards will improve to good riparian condition.

The Winema National Forest Plan Standard and Guideline 9-23 (p. 4-67) states that *"[t]he [allotment management]plan shall address the monitoring needed to determine if the desired rate of improvement is occurring".* Monitoring every 5 years does not constitute a "schedule for improvement" and fails to establish a desired rate for improvement. Grazing exclusion in alternatives 4 would provide the desired rate of improvement. The Forest Service has stated in a response to KSWild comment: "*The [Jack Creek] exclosures have been in place 5 to 10 years and should have healed."* The Forest Service says grazing exclusion heals the stream in 5-10 years but rates for "healing" with grazing in Alternatives 2, 3 and 5 are unknown.

Neither the Modified Preferred Alternative nor the Monitoring Plan demonstrates how or why deferred grazing or high intensity grazing "is needed" to improve riparian conditions. Grazing exclusion is the only known technique that has been proven effective for improving riparian conditions in this allotment. Grazing exclusion is certain to obtain desired results in the context of a "schedule for riparian improvement" whereas deferred grazing or high intensity grazing has no certainty for a "schedule for riparian improvement". The EA cannot reliably predict when or even if riparian conditions will improve with deferred grazing or high intensity grazing.

E. Best science means the technique is described as a method and can be repeated. Methodology ensuring scientifically valid assessments is not apparent with Adaptive Management monitoring.

The EA fails to include descriptions of methods identified in Monitoring Plan & Desired Future Condition For example, effectiveness monitoring for riparian ecologic condition and trend lists "rooted frequency", "Greenline MIM" , "PFC", "photo points", "BMP", however, there is no description of what these are or how they are measured. This is important. The Council on Environmental Quality (CEQ) has promulgated regulations to implement NEPA, which are binding on all federal agencies. 40 C.F.R. § 1507.1. The information presented in an EIS (or EA) must be of high quality. 40 C.F.R. § 1500.1(b). "Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA." "Agencies shall insure the professional integrity, including scientific integrity, of the decisions and analysis in environmental impact statements." 40 C.F.R. § 1502.24. "<u>They shall identify any methodologies used and shall make explicit reference by footnote to the scientific and other sources relied upon for conclusions in the statement.</u>" (emphasis added).

9. We object to Implementation Monitoring in Fens (Appendix G-7) because it inappropriately allows for downward trend in fens as measured with percent "bare soil". The wording of the Desired Future Condition is a grazing loophole to provide

for grazing damage and downward trend in fens and riparian management areas. The EA fails to use the appropriate Allotment Management Planning Standard and Guideline 9-23 that was specifically written for riparian area management.

The trend measurements must first establish a baseline condition which has been defined as percent bare soil. The Forest Plan provides for maintaining condition or improving the riparian condition. For example, a monitoring activity area that currently has 2% bare ground and subsequent to grazing has 8% bare ground has downward trend and is in violation of Forest Plan. There is no need to exceed 10 percent bare ground to demonstrate downward trend as implied in the EA. The intent of the Forest Plan riparian management is to prevent downward trend since it only provides for "maintain or improve". Appendix G states that " a desired future condition of 10% bare soil was established for maintaining fen habitats in the Project Area." The 10% bare ground standard is not an appropriate Forest Plan grazing "objective" as is stated because it would allow degradation of fens with less than 10% bare ground. Ten percent bare soil is a significant and undesirable condition. There is no ecologic "need" in the published fen literature to increase bare ground in a fen towards the 10% degradation standard. The 10% bare ground "desire" is being used as a specious rationale to graze until the soil impacts exceed desired condition. This approach is based on degradation and has no restorative purpose. Allotment Management Planning Standard and Guideline 9-23 is the appropriate management direction that was specifically written for riparian area management when developing AMPs. Standard and Guideline 9-23 is not being implemented with AMP planning as intended.

10. **We object to the use of a single criteria (% bare ground) as the sole deciding factor about the condition and trend of riparian areas and fens as they relate to annual operating and ten year AMP decisions concerning livestock grazing distribution (Appendix G and Botany Report).**

Although bare ground is a useful degradation threshold, the presence/absence of bare soil alone is not a scientifically valid parameter to gauge acceptable cattle grazing impacts in riparian management areas and sensitive fens (photos 5,6). Other factors besides bare ground need to be considered that would require annual adjustments or AMP cattle exclusion.

a. Peat Formation. Peat formation needs to be monitored in some fens and made a criteria for livestock management.
b. Cattle Safety. Cattle have a propensity to become mired in the larger high value fens such as the one on upper Jack Creek. Livestock ought to be excluded from porous fens that can kill cattle. . .
c. Spotted Frogs. Cattle would need to be excluded from known or potential spotted frog habitat on all areas of Jack Creek including the North Sheep pasture because of potential for trampling and local degradation of small pools (Photos 3,4).
d. Recreation. Some easily accessible fens would be prime areas for public education trails and platforms. Cattle would logically need to be excluded to avoid adverse interactions with the public. Fens are not the place to promote multiple use with livestock.
e. Scientific Monitoring. Some high value fens in the allotment need to have the fen and local hydrological source area excluded from grazing to provide monitoring of peat

formation, nitrogen and other groundwater chemicals that could be altered by grazing.

f. **Allotment Management Planning** Standard and Guideline 9-23 states that: "*Measurable objectives shall be set for key parameters, such as shaded stream surface, stream bank stability, and shrub cover. This process is described in "Managing Riparian Ecosystems (zones) for Fish and Wildlife in Eastern Oregon and Eastern Washington' (1979). The plan shall address the monitoring needed to determine if the desired rate of improvement is occurring.*"

11. We object to proposed grazing in the Chemult Pasture with alternatives 2, 3 and 5. The Chemult Pasture is currently not suitable for proposed intensive cattle grazing because it is in need of extensive restoration to prevent sensitive species loss. Adaptive management based on permissive 1990 Forest Plan standards is not likely to restore severe degradation caused in part by decades of livestock grazing.

The EA 1-7 states that 90% of the forage in the allotment is within riparian areas (Management Area 8) and that percent is even higher in the Chemult pasture where cattle use is concentrated along streams and in wet meadows/fens. Six fens are in poor condition due to livestock grazing and seven others in fair condition. Forest Plan standards allow for 10% bare ground in riparian areas where pedastalling and compaction would be severe, however, these 13 fens currently exceed Forest Plan standards as reported in Botany Report (Table A3). Headcutting associated with loss of beaver and loss of aspen is degrading Jack Creek (Photos 7-13). Spotted frogs are nearly extirpated and Miller Lake lamprey trend/abundance is unreported.

12. We object to proposed monitoring and adaptive management being misused to allow irreversible grazing impacts that threaten Jack Creek Oregon spotted frog existence. The Forest Plan requires adequate habitat be maintained for wildlife and sensitive species. The proposed spotted frog listing indicates a minimum of ten acres of wetland is needed for a viable spotted frog population.

Forest Plan S&G 9-20 for **Allomen**t **Management Planning**: Coordination requirements with other resource operations shall include: (1) threatened, endangered, and Sensitive plant and animal species; (2) riparian area conflicts; (3) livestock and wildlife conflicts; (4) the reduction in the spread of noxious weeds where present; (Forest Plan 4-67)

Fish and Wildlife (Forest Plan 4-6)

Goals

5. Maintain or enhance the Characteristics of riparian areas, wildlife habitat, and fish habitat near or within riparian ecosystems.

6. Manage habitat for the perpetuation and/or recovery of plants and animals listed as threatened, endangered, or sensitive.

7. Provide habitat for viable populations of all existing native and desired non-native vertebrate species.

a. Oregon spotted Frog (Sensitive-Proposed for Federal Listing)

The Monitoring Plan (App G-6) identifies "open water" habitat for spotted frogs but provides for no monitoring of its precise location or desired acreage extent. The Proposed Listing for Oregon

spotted frogs states that "[t]he minimum amount of habitat thought to be required to maintain an Oregon spotted frog population is about 10 ac (4 ha) (Hayes 1994, Part II pp. 5 and 7). Smaller sites generally have a small number of frogs and, as described above, are more vulnerable to extirpation. Some sites in Oregon are at or below the 10-ac (4-ha) threshold; (78FR53611)." Alternatives 2, 3 and 5 have no requirement to provide adequate habitat for viable populations of spotted frogs as is required in Winema Forest Plan p.4-6 ("Provide habitat for viable populations of all existing native and desired non-native vertebrate species.").

Alternatives 2,3, 5 and the Monitoring Plan violate the Forest Plan because they have failed to coordinate with wildlife biologists to identify the location and amount of wetland habitat needed by Oregon spotted frogs to maintain viability (with 10 acres of season long wetland being the minimum needed).

Coordination of range activities with wildlife biologist for quantitative monitoring of critical life stages of Oregon spotted frog is not identified in a monitoring plan. Spotted frog presence and critical habitat needs are not integrated into monitoring and adaptive management as required in AMP planning Standard and Guideline 9- 20.

The adaptive management strategy documents undesirable effects after they occur. This is not acceptable with Jack Creek Oregon spotted frogs that are on the brink of extirpation. Infrequent but damaging disturbance or adverse direct impacts cannot be reversed and are rarely documented with infrequent monitoring. The impact of a cow that becomes mired and dies in a spotted frog use area cannot be reversed. Urination in small isolated pools with spotted frogs cannot be mitigated with adaptive management. Monitoring (as we have seen summer 2013) cannot prevent biological impacts to frogs that could prove significant (Photos 3,4).

b. Miller Lake Lamprey (Sensitive)

Biological surveys of Miller Lake lamprey for distribution and abundance is not integrated into a Monitoring Plan for Alternatives 2,3, and 5. The required coordination with fisheries biologist for allotment planning has not been fulfilled (S&G 9-20). The EA fails to identify the specific reaches of Jack Creek needed to maintain a viable population of Miller Lake lamprey.

c. Mollusks

The EA has no monitoring for mollusks known to occur at springs proposed for grazing.

d. Beaver

Beaver are important because their dams aggrade incised streams and provide open water habitat for spotted frogs. Beaver and cattle often conflict for habitat. The loss of beaver from Jack Creek was partly due to unresolved conflicts between beaver and livestock management. The beaver were extirpated ca 2000. Beaver were released into Jack Creek in 2012 to implement the Spotted Frog Site Management Plan. The proposed grazing alternatives fail to coordinate with wildlife to develop explicit and required monitoring of beaver activity and potential conflicts with livestock (see Ott and Johnson 2005). The required coordination with wildlife biologist to avoid livestock/beaver conflicts with allotment management planning has not been fulfilled as required in S&G 9-20. Coordination between range and wildlife is needed in the AMP to ensure beaver activity is monitored and conflicts with livestock are minimized. The proposed riparian grazing to allowing cattle foraging to consume up to 40% of the willow/aspen (EA2-22) is not appropriate in an area where beaver are desired.

Vegetation for beaver needs to be assessed quantitatively and identified for protection and restoration. Aspen and willow need to be restored (Photo 16). Trapping needs to be explicitly prohibited on public lands and beaver trappers informed.

13. **We object to the Forest Service misuse of adaptive management to justify expanding grazing impacts into areas currently being excluded from grazing. Ongoing riparian recovery and wildlife use will be jeopardized.**

No natural resource parameter will be improved by reintroduction of grazing in areas recovering from grazing damage. The Implementation and Effectiveness Monitoring fails to identify specific monitoring condition and desired monitoring condition for each grazing unit/pasture as required for Adaptive Management. Scales for assessing vegetation and soil damage are not standardized to an ecologically appropriate scale. Is the Forest Standard measured at 10% damage per acre, 10% damage per 10 acres, or 10% damage per100 acres? Riparian Management activity areas must be delineated at appropriate scales for monitoring and management.

Merely monitoring to one Forest Plan standards as proposed for Alternatives 3 and 5 is not Adaptive Management. It appears the proposed alternatives 3 and 5 is conducting grazing as usual in most pastures and simply calling it "Adaptive Management". Chronic trespass along Jack Creek and lack of effective fencing are not being addressed with Adaptive Management (Photos 2,3,4). We are concerned that Adaptive Management will be misused to allow cattle to be about anywhere at any time, in or off the allotment. Adaptive management is being used to weaken Forest Plan standards because existing Forest Plan standards cannot met with proposed grazing in riparian management areas (i.e. maintain or improve).

Range Readiness

14. **The Chemult and North Sheep pastures are not suitable for proposed livestock grazing in Alternatives 3 and 5 due to: 1) lack of range readiness from chronically saturated soil conditions that persist through the summer; 2) saturated/unstable soils prevent effective fencing to control livestock 3) inherent conflicts between beaver, Oregon spotted frogs and sensitive species with concentrated livestock use in Riparian Management Area 8.**

Despite deficiencies about range readiness in the Winema Forest plan, The Forest Service Handbook (92.23b - Adaptive Management) states:

"1. *When livestock grazing is proposed using an adaptive management strategy, the proposed action shall set defined limits using adaptive management principles of what is allowed, such as timing, intensity, frequency, and duration of livestock grazing. These limits set standards that can be checked through monitoring to determine if actions prescribed were followed, and if changes are needed in management. "*
"Examples of administrative decisions include:

a. *Determination of specific dates for grazing,*
b. *Specific livestock numbers,*
c. *Class of animal,*
d. *Grazing systems, and*
e. ***Range readiness when these variables fit within the NEPA-based decision."***

The EA pages 2-3.4 describes Forage Conditions & Use, Range Readiness, Soil Readiness, and Vegetative Readiness. The discussion implies the unstated, but false assumption, that all pastures become "range ready" at some predictable point in the grazing season. The subjective and qualitative description for range readiness parameters provide for no measurable standard or methods to identify wetland fens, Riparian Management 8 areas, or pastures that are unsuitable for cattle grazing due to yearlong moisture and therefore, in most years <u>never</u> become "range ready" (e.g., fens, Jack Creek shallow isolated pools with Oregon spotted frogs). The false assumption that fens become range ready has resulted in the Monitoring Plan using "bare ground" (ostensibly created from trampling damage) as the criteria for determining when cattle must move from the fen. The EA, Implementation Monitoring in Appendix G-8 and Botany report suggests that annual grazing that causes "bare ground" will be used to determine allowable maximum use rather than forage utilization as the bare ground 10% standard is generally exceeded before the 50% vegetation utilization standard. Annual and predictable soil damage strongly suggests that these fens are being grazed prior to soil range readiness and this results in damage not allowed with Forest Plan standard to maintain or improve riparian areas. For example, Appendix G-8 Monitoring and Adaptive Management states for the Chemult Pasture: If 5 or more fens distributed throughout the pasture exceed the [10% bare ground] standard, livestock will be removed from the pasture for the remainder of the grazing season." We contend that many fens never become "soil range ready" otherwise there would be little to no development of bare ground from cattle trampling/foraging.

The Winema Forest Plan (4-141,142) lacks standards for range readiness on Riparian Management Area 8C and merely states *"[l]ivestock will be controlled to maintain or improve vegetative condition of moist and wet meadows*." The EA states that *"[r]ange readiness criteria are established and observed for <u>each particular location and management situation.</u>"* (emphasis added) This misleading statement has no applied factual basis. No criteria or standards for range readiness have been established for each of the 35 fens (Management Area 8C) identified in the Botany Biological Evaluation (p.99-103) and none have been established for Riparian Areas (Management Areas 8A) adjacent streams (e.g., Jack Creek stream reaches). The range readiness criteria appear to be inappropriately applied at the "pasture scale". To achieve Forest Plan objectives, range readiness must be applied to each specific Riparian Management Area such as each fens, each wet meadows, and each stream reach (i.e. ecological scales).

Bias in favor of proposed "*lightly stocked*" grazing is apparent with qualitative and subjective descriptions for soil readiness. The EA2-4 states that "[s]oils should be *fairly dry and firm*. Wet meadows, *unless lightly stocked*, should be dry enough to carry stock without breaking the sod and adversely impacting the cover." (emphasis added) The EA inappropriately provides an soil readiness exception to allow turnout into wet meadows and fens if "*lightly stocked*" and also apparently to then graze until 10% of the vegetation is trampled to bare ground.

The fact that fens can swallow up an errant cow ought to be cause not to allow even *light stocking* in wet meadows and fens. The range readiness criteria fail to consider the possibility of cattle becoming mired in the fen and dying. Due to the unpredictable nature of waterlogged peat, cattle deaths are always a possibility where fens have substantial wet patches. Carcasses would cause substantial pollution. Portions of fens never become "dry enough to carry stock without breaking the sod and adversely impacting the cover." EA2-4. Fens are not predictably "soil range ready" and therefore are not suitable for annual intensive grazing.

NEPA requires that methodology be included in the EA for field techniques such as determining "range readiness". The EA fails to provide a scientific methodology for determining range readiness for "*each particular location and management situation."* Currently the range readiness descriptions in the EA provide for subjective determinations with no technical or quantitative method that can be independently verified. The Council on Environmental Quality (CEQ) has promulgated regulations to implement NEPA, which are binding on all federal agencies. 40 C.F.R. § 1507.1. The information presented in an EIS (or EA) must be of high quality. 40 C.F.R. § 1500.1(b). "Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA." "Agencies shall insure the professional integrity, including scientific integrity, of the decisions and analysis in environmental impact statements." 40 C.F.R. § 1502.24. "They shall identify any methodologies used and shall make explicit reference by footnote (emphasis added)

A previous Forest Service response to KSWild comment about range readiness states *"[a]gree that cattle grazing could impact fens; our analysis discloses the degree of likely impacts and concludes they are within Forest Plan standards and guidelines."* This misleading statement is not supported with facts and is false. The Botany Biological Evaluation (Table A-3) identifies 13 fens (Management Area 8C) that are not meeting Forest Plan standards (Forest Plan p. 137) because undesirable soil disturbance caused by livestock grazing exceeds 10%. These fair to poor condition fens all have surfaces that are damp to wet or mostly wet. The subjective range readiness guidelines in the EA will result in continued detrimental soil conditions (compaction, displacement, puddling, pedestalling, post holing, trailing) identified as not acceptable in Forest Plan (p. 4-137). Range readiness determinations by Forest Service range staff failed to prevent degradation or restore these damaged fens over the past 20 years of grazing, including the 2013 season. Thus, there is no scientific factual basis for soil, range, wildlife or botany predicting improved conditions of riparian management areas in the Chemult Pasture with alternatives 2, 3 or 5.

A previous Forest Service response to KSWild comment about range readiness states "*Monitoring and adaptive management would be used to protect high priority fens; as needed."* This misleading statement is not supported with facts and is false. Previous monitoring and adaptive management over the past 20 years has failed to protect fens from degradation. Only livestock exclusion has been proven effective. The Botany Report Table A-3 reports that all 8 fens that have been excluded from grazing are in good condition and all 5 fens in the ungrazed North Sheep pasture are in good condition. No amount of "adaptive management" can change the sensitive physical nature of wet meadows, streams, and fens within the proposed pastures/units. Past monitoring and documented soil damage strongly suggests that "no

grazing" with alternative 2 riparian exclosures or Alternative 4 is needed to provide certainty for attaining desired ecological conditions in a reasonable amount of time (probably much less than ten years). Alternatives 2,3 and5 provide for a never ending cycle of degradation and sporadic superficial recovery.

Oregon Spotted Frogs, Miller Lake Lamprey, Beaver, Elk

15. We object to the EA because it failed to identify Proposed Critical Habitat for the Oregon spotted frog that would or would not be grazed in various alternatives.

The EA:65 states "[f]or the purposes of this analysis, potential [spotted frog] habitat includes only those lands that currently are capable of supporting OSFs based on ground knowledge and professional judgment (Table 3.7)." The EA must be updated to include analysis of all proposed critical habitat identified by the Fish and Wildlife Service for Jack Creek [3]. Areas of known habitat but not identified as proposed critical would also need to be analyzed. For example, Table 3-7 would need to identify proposed critical habitat and habitat that is either currently supporting Oregon spotted frogs or is capable of supporting Oregon spotted frogs. Similarly, Table 3-11 needs to disclose acres of critical habitat grazed and non-critical habitat grazed.

16. We object to Round Meadow not being identified in the EA as potential Oregon spotted frog habitat and managed for frog introduction (Photos 5,6).

a. Round Meadow is currently fenced and excluded from livestock grazing within the Chemult pasture of the Antelope Allotment. Oregon spotted frog introduction would provide a high need and priority for full wetland restoration.
b. There are no predatory fish or bullfrogs in Round Meadow. Similar habitats (Big Marsh) have abundant and viable Oregon spotted frog populations. Minor amounts of Reed canary grass can be controlled.
c. Round Meadow is "representative" of the historical geographical and ecological distributions of OSF.
d. Round Meadow would contribute needed resiliency because of its large size and stability.
e. Round Meadow would contribute needed redundancy for the Jack Creek OSF population that is at precariously low abundance. The EA:3-64 states that maintaining [spotted frog] habitat would also allow for reintroduction if the [Jack Creek] population becomes extinct in the near term. A spotted frog population at Round Meadow would provide a source population if the Jack Creek population is extirpated.
f. Round Meadow is suitable for introduction and would provide OSF viability in the future should stochastic events extirpate the nearby extant Jack Creek population.

17. **We object to the EA because it fails to disclose that Jack Creek spotted frogs are likely to be extirpated during the next ten years regardless of alternative chosen.**

[3] Proposed Critical Habitat maps can be accessed at http://www.fws.gov/wafwo/osf.html

> The EA:3-64 states that maintaining [spotted frog] habitat would also allow for reintroduction if the population becomes extinct in the near term. Speculation about reintroduction gives the reader and decision maker the false impression that extirpation of Jack Creek spotted frogs is easily reversed. The loss of this unique high elevation population would be an irretrievable loss and constitutes a significant but undisclosed impact. The EA:3-109 erroneously states that "this project will not contribute to a negative trend in viability on the Freemont-Winema National Forest for OSF". The cumulative effect of livestock grazing over space and time over the last 20 years would contribute to the potential loss of this distinct population of spotted frogs. The loss of any frog population would certainly contribute to a negative trend as discussed in the proposed spotted frog listing.

18. We object to the EA arbitrarily stating that proposed actions (or inactions) will not contribute to the need for spotted frog listing or cause a loss of viability.

The EA:3-109 errs by stating that "this project will not contribute to a negative trend in viability on the Fremont-Winema National Forest for OSF." The EA failed to support this statement with scientific analysis of viability. New information in the Proposed listing identifies livestock grazing as contributing to spotted frog declines on the Fremont-Winema Forest.

The EA:3-109 states that Alternatives 3 and 5 "*may impact individuals or habitat, but will not likely contribute to a trend towards federal listing or cause loss of viability to the population or species.*" The above statement is directly contradicted by August 2013 proposed listing of Oregon spotted frogs that specifically identified grazing along Jack Creek as a contributor to the need for federal listing:

> "Six sites in the Klamath Basin are associated with grazing: Jack Creek, Buck Lake, Parsnip Lakes, and on private lands on the Wood River, Williamson River, and adjacent to Klamath Marsh NWR. These sites are potentially vulnerable to both the direct impacts of grazing sedimentation, trampling, as well as the indirect effect of egg mass desiccation resulting from water management techniques that drain water early in frog breeding season to stimulate grass production. Livestock grazing is cited as a specific concern for Oregon spotted frogs at Jack Creek, Fremont-Winema National Forest, Chemult Ranger District, in Oregon (USDA 2004, pp. 56–57). Since 1999, the population has reduced from 670 breeding adults (335 egg masses) to 34 breeding adults (17 egg masses) in 2011." 78FR53600

Clearly the federal grazing program as implemented with the Winema Forest Plan over the past 22 years has significantly contributed to the decline of the Jack Creek spotted frog population and has also contributed to the need for August 2013 proposed federal listing. The proposed listing also demonstrates the need to conserve **all** spotted frogs. The Forest Service has not demonstrated that there are surplus Jack Creek frogs that can be wasted to accommodate livestock grazing.

Extirpation of the Jack Creek spotted frog population is likely during the next ten years with continued grazing and no increases of open water habitat. The EA:3-64 states that maintaining

[spotted frog] habitat would also allow for reintroduction if the population becomes extinct in the near term. Habitat is no substitute for actual spotted frogs and the success of reintroduction is speculative and highly unlikely. This speculation about reintroduction gives the reader and decision maker the false impression that extirpation of Jack Creek spotted frogs is easily reversed when it is not.

19. We object to proposed grazing with Alternatives 3 and 5 because of sensitive species conflicts with livestock grazing and failure of EA to identify adequate habitat for wildlife.

The Winema Forest Plan Standard and Guideline 4.7 on page 4-47 states, "*Habitat use of the Winema National Forest by these [sensitive] species shall be evaluated. Habitat requirements sufficient to maintain the species shall be provided."* Similarly on page 109 of the Fremont Forest Plan, "*Habitat for sensitive plants and animals shall be managed or protected to ensure that the species do not become threatened or endangered because of Forest Service actions….maintain or increase the status of populations and habitats*." Forests are required to review programs and activities through a biological evaluation, to determine their potential effect on sensitive species.

The decline of Jack Creek spotted frogs to an estimated 20 individuals clearly demonstrates that the Winema Forest Plan failed to maintain adequate habitat. This deficiency continues because the EA fails to identify adequate habitat for recovery. Direct and indirect conflicts between spotted frogs and livestock are likely to occur in Riparian Management Areas along Jack Creek (Jack Creek Spotted Frog Site Management Plan). The Winema Forest Plan (4-12) states that "*the demand for livestock grazing will be met only when it does not conflict with other uses*". Continued grazing in presumed unoccupied habitat along Jack Creek is in conflict with restoration objectives and must not be allowed with proposed grazing in Alternatives 3 and 5. The Jack Creek Spotted Frog Site Management Plan and Alternatives 2,3 and 5 are not consistent with the Winema Forest Plan because they do not provide for sufficient acres of quality habitat for viable numbers of spotted frogs through elimination of livestock conflicts. The Proposed Listing for Oregon spotted frogs states that "[t]he minimum amount of habitat thought to be required to maintain an Oregon spotted frog population is about 10 ac (4 ha) (Hayes 1994, Part II pp. 5 and 7). Smaller sites generally have a small number of frogs and, as described above, are more vulnerable to extirpation. Some sites in Oregon are at or below the 10-ac (4-ha) threshold; (78FR53611)."

20. We object to proposed grazing in alternatives 3 and 5 because grazing would cause conflicts with beaver.

Beaver are critical for spotted frog viability because of the open water ponds they create. with dams. Cattle are in conflict with beaver in Riparian Management Areas because cattle eat willow, aspen and herbaceous vegetation that are the beavers main food sources and building material. Cattle also undermine beaver dams with trampling and promote undesirable conifer encroachment at the expense of broadleaved plants (Ott and Johnson 2005. Merely regulating livestock browsing on willow to 30% creates beaver/livestock conflict when willow supply is low (Winema Forest Plan 4-63 Table 4-16). Abundant willows provided by livestock exclusion are needed to attract and feed hungry beavers

(Photo 16). Failure of Winema Forest Plan to specifically require maintenance of beaver on Jack Creek was a major cause for spotted frog decline. Similarly, alternatives 3 and 5 fail to eliminate beaver/cattle conflicts in Riparian Management Areas that formerly contributed to the spotted frog decline. Winema Forest Plan (4-12) states that "*the demand for livestock grazing will be met only when it does not conflict with other uses*". Desired restoration of beaver along Jack Creek is in conflict with proposed grazing within existing exclosures.

21. We object to proposed grazing in alternatives 3 and 5 that would cause conflicts with Miller Lake lamprey and other sensitive species.

Many sensitive species are dependent on Riparian Area Management Area 8, but population data is generally lacking and the Forest Service speculates about abundance. For example, The Fisheries BE p. 37 states that *"[r]elative abundance data for Miller Lake lamprey is incomplete, so increases or decreases in the number of individuals making up the Jack Creek population would be impossible to detect."* This alarming statement means that Miller Lake lamprey and other sensitive species not monitored could be declining to extirpation as are the spotted frogs. No population data for Miller Lake lamprey is provided in the Fisheries BE but a Forest Service response to previous comment identifies anecdotal observations and a "2010 lamprey survey conducted with ODFW collected lamprey from Jack Creek behind 'frog fence' upstream to headwaters above Moffit Mdw."

The Forest Service response to comments says "*surveys are not required; therefore; we assume presence. Abundance estimates are not required under NEPA*." Assuming presence while livestock grazing continues is not justified when endemic sensitive species such as Miller Lake lamprey are at risk. The DEIS describes damage to streams from livestock grazing (i.e. conflict) (See photos 7-12). The Fisheries BE p. 34 states that *"[a]lternatives 3 and 5 propose grazing behind the Jack Creek riparian fence, which would increase potential impacts to Miller Lake lamprey*" Similar increased impacts is true for spotted frogs, mollusks and numerous plant species with alternatives 3 and 5. Risks and grazing conflicts involving sensitive species will be increased contrary to the Forest Plan. Winema Forest Plan (4-12) which states that "*the demand for livestock grazing will be met only when it does not conflict with other uses*".

Excluding livestock from high value fens and from Jack Creek Riparian Management areas would eliminate livestock conflicts as intended with the Forest Plan (Alternative 4). The Winema Forest Plan 4-137 does states: [*u]nder extreme conditions, the area may need permanent protection or removal of grazing for long periods (Clay and Webster 1989).* Monitoring has shown that successful and relatively rapid improvement occurs when livestock are excluded for long periods. (Photo 16).

22. The EA failed to adequately disclose the significance of adverse impacts to elk and elk calving caused by reintroduction of livestock grazing into North Sheep pasture with Alternatives 3 and 5.

The EA: 3-52 states:

> The project area contains summer habitat and there is a large known elk calving area within a large portion of the Chemult, North Sheep, and Tobin Cabin Pastures. This elk calving area was identified by a study conducted by Oregon Department of Fish and Wildlife between 1988 and 1993. Part of the North Sheep Pasture is within the Sugarpine Mountain Cooperative Travel Management Area which is in place to improve habitat effectiveness for big game species, to minimize vehicular harassment to wildlife, to provide a variety of recreational opportunities, including a quality hunting experience, and to achieve an open road density of 0.7 roads per square mile.

The significance of livestock impacts to elk calving are not adequately disclosed in the EA. The effectiveness of the Sugarpine Mountain Cooperative Travel Management Area in the North Sheep pasture is being undermined. Alternatives 3 and 5 increase livestock conflicts with elk on 20,000 acres in the North Sheep pasture (EA 2-127). This impact h is contrary to Forest Plan and Allotment Planning guidelines to decrease wildlife conflicts with livestock grazing.

Riparian Management Areas, Fens and Streams

23. We object to the EA because project level planning for the Antelope Grazing Allotments Project failed to adequately identify the "specific boundaries" of Management Area 8 as required in the Forest Plan.

The EA:3-148 identified 8,070 acres of riparian and wetland in the Allotment which would be classified as Management Area 8. Table 3-29 identifies up to 4,643 riparian acres that would be grazed in Alternative 3. The EA fails to explain the discrepancy between these two estimates for Management Area 8 riparian acres. The Winema Forest Plan (4-136) states that *"[s]pecific boundaries of this [Riparian] management area are identified during project level planning."* The EA Alternatives provide maps delineating livestock grazing in Riparian Areas (Management Area 8) but fails to spatially distinguish Riparian Areas from forested upland allocations on maps of the Allotment (Appendix A). Failure to systematically identify all Riparian Areas prevents effective monitoring of condition and trend for this land allocation and more importantly fails to spatially identify specific Riparian Areas that are in downward trend and not meeting Forest Plan standards. The Botany Biological Evaluation (p.99-103) identifies about 35 riparian fens, but this only addresses about 4% of Riparian Management Area 8. The EA fails to spatially delineate Management Areas 8A and 8B that would include many thousands of acres of Riparian Management Area 8 (Table 3-29). Each riparian Management Area 8 must be identified with "specific boundaries". Jack Creek stream reaches were not identified in the AMP as required to assess streambank damage. The EA cannot assert compliance with 5% stream bank damage standard (Winema Plan:140), the 10 percent detrimental soil condition standard (Winema Plan:137), or "the maintain or improve " riparian standard if the Riparian (activity) Areas are not spatially designated and monitored as distinct entities.

The Winema Forest Plan p. 4-136,137 states that:

Specific boundaries of [riparian] management area are identified during project level planning.

1.Riparian area management objectives shall be described for a specific zone along a stream or wetland within the proposed project area. As a minimum, the following areas shall be evaluated during the preparation of the objectives:

a. an area within 100 feet of the normal high water line of Class I, II, or 111 streams (for protection of water quality and wildlife habitat);
b.an area within 25 feet on each side of Class IV streams;
c.any timbered area within 200 feet of wet meadows (to provide wildlife hiding cover),
d.the entire area of a wetland, including the farthest reaches of the riparian vegetative influence, and
e.any seeps and springs.

2. The cumulative total area of detrimental soil conditions in riparian areas shall not exceed 10 percent of the total riparian acreage within an activity area. Detrimental soil conditions include compaction, displacement, puddling, and moderately or severely burned soil.

24. **The EA fails to adequately disclose grazing impacts to riparian areas and wetlands that results in poor and fair condition that do not meet Forest Plan Standards. Only 4% of the Riparian Management areas have been surveyed and even fewer will be monitored.**

The EA:3-148 identified 8,070 acres of riparian and wetland in the Allotment and identified 4,643 acres that would be grazed with alternative 3 (EA 3-153 Table 3.29), however, the EA t failed to systematically assess condition and trend on these riparian acres with various alternatives. Botanical surveys found a high amount of variability of fen condition due to size, location in the Chemult pasture, and grazing exclusion. Thirty-nine fens were surveyed (Botanical Report Table A-3) and 25 were in good condition (<10% soil damage); 8 in fair condition (10-20% damaged) and 6 in poor condition (>20% soil damage). This survey covered 328 riparian acres of the 8,070 riparian present in the allotment. Only 4% of the riparian and wetlands in the Allotment have been surveyed for condition and none for trend. Nevertheless, the botanical fen survey suggests that a 1/3 of the Riparian Management areas are in poor condition with 10% or greater soil damage from grazing. The Monitoring Plan would study trend at only 12 Riparian sites when a hundred or more are likely being damaged by grazing.

A good condition rating means there can be up to 10% soil damage and meets the Forest Plan standard for bare ground.. This allowable "Forest Plan" degradation in Riparian Management 8 areas is significant, however, since some heavily grazed wetlands do not exceed this forest standard (e.g. Round Meadow) and are classed as "good" condition even though undesirable pedestalling, compaction and erosion is prevalent (Photos 5,6).

The concern is that 9 acres of bare ground from trampling on a 100 acre riparian area may meet one Forest Standards but the cumulative impact must be disclosed as an impact in the EA. The cumulative damage to riparian areas is not disclosed (e.g.,quant. estimates of bare ground, gullying, lowered water tables.).

25. **We object to Alternatives 2, 3 and 5 because they do not effectively incorporate required desired improved condition, upward trend and enhancement objectives for Riparian Management Area 8 on 4,643- 8,070 riparian acres where most livestock grazing will occur. Monitoring and adaptive management is largely limited to monitoring high and medium value fens that comprise only 4% of Riparian Management 8.**

    Inventory, monitoring, and a mechanism for eliminating harmful livestock grazing appears to be limited to sensitive plants primarily found in high and medium value fens that comprise about 4% of Riparian Management Area 8 (See Botany Report Table A-3 and Appendix G Monitoring Plan). The Forest Plan is being violated because inventory, monitoring and adaptive management is not being applied to the remaining smaller "low" value fens or the approximately 7,700 acres of non-fen riparian areas. Based on the fen inventory (Botany Report A-3) an estimated 1/3 of these un-inventoried riparian acres are exceeding the Forest Plan 10% standard for disturbed soil but lack spatial identification or management mechanism for improved condition. Alternatives 2,3, and 5 have mapped grazing pastures but have not mapped the boundaries of approximately 4,600- 7,700 acres of non-fen riparian management areas, conducted inventories for condition, monitored trend, or developed a management mechanism for maintaining or improving trend as required in the Forest Plan.

26. **We object to proposed grazing in riparian exclosures and lower Jack Creek (North Sheep Pasture) because the grazing systems in Alternatives 3 and 5 are not supported by science as a credible restoration technique and grazing will cause damage not allowed in the Forest Plan.**

The Winema FP page 4-139, Management Area 8A states: "*Livestock shall be managed so that no more than 5 percent of the stream banks in a stream reach exhibit degradation caused or perpetuated by livestock"* The AMP fails to coordinate with fish biologist to provide for up to date inventory of stream bank condition and monitoring program as required with S&G 9-20. No stream survey has been completed since 2003, .Although streambank monitoring is mentioned in the Appendix G there is no delineation of reaches on Jack Creek in the EA or identification of baseline data collection prior to grazing implementation

A previous response by the Forest Service to a similar KS Wild comment stated that *"impacts would remain within that allowable under the Forest Plan Standards and Guidelines*", however, no applicable standard and guideline is identified. The assertion that grass grows back on damaged riparian areas does not mean the riparian areas are recovered ecologically. No recent scientific data is provided to demonstrate that standards have been met or could be met. The Winema Forest Plan page 4-6, Fish and Wildlife Goals state: "*5. Maintain or enhance the*

characteristics of riparian areas, wildlife habitat, and fish habitat near or within riparian ecosystems." This standard to maintain current conditions or enhance cannot be met as some measureable soil degradation will occur with the reintroduction of grazing. The monitoring plan would allow bare soil to increase to 10% or more in riparian areas that currently have no bare soil (Photo 16).

Winema Forest Plan page 4-74, Riparian Ecosystems:
12-9 For those projects that could adversely affect riparian ecosystems, water quality, or stream structure and function, specific objectives for the management of riparian areas shall be developed during project environmental analysis. (emphasis added)
12-10 In riparian ecosystems, hydrologic conditions and riparian habitat shall be maintained or improved.

No specific objectives for measurable quantitative improvements for Jack Creek hydrologic conditions have been identified. For example, " Jack Creek open water habitat in late summer will be increased from xx acres to xx acres by 2015 with habitat enhancement in areas excluded from grazing." Merely monitoring streambank damage is clearly inadequate to recover spotted frogs or maintain Miller Lake lamprey. Objective towards improving Jack Creek quantitatively with a schedule is not provided in the EA for any alternatives. No required monitoring of predicted improved conditions is included with EA.

The BE for fisheries (p.18) states *"[p]ast grazing has led to biomass removal and trampling, alterations in species composition, compaction of soils, changes in fuel loading and the fire regime, downcutting of riparian areas with subsequent drying of adjacent meadows. Within riparian areas and wet meadows livestock grazing has led to churning of the soil and hummocking."* Clearly, hydrologic condition and riparian habitat have not been maintained or enhanced with grazing as required in Forest Plan. (Photos 7-12)

The Forest Service in response to previous KSWild comment on this issue stated that *"[g]razing duration in currently grazed fenced riparian areas would be limited to 15-30 days; and these areas would likely remain in healthy condition under this strategy and would meet appropriate Forest Plan Standards and Guidelines (Hydrology report; page 44)."* Since past grazing with Forest Plan standards failed to maintain or improve as described in Fisheries BE p. 18 (above), one cannot reasonably expect superior results by complying with the same standards and guidelines that created the damaged stream in the first place: Same Forest Plan, same standards, same degraded streams with grazing (Photo 2).

The Forest Service in response to previous KSWild comment states: "*Some headcuts are present within the project area; the proposed grazing strategy in areas where some headcuts are located would be at a duration and intensity where potential damage would remain within Forest Plan Standards and Guidelines."* No applicable standard and guideline is identified to support grazing in the vicinity of headcuts or where headcutting potential exist because no such Forest Plan S&G exists. The Forest Plan 4-137 does states: [*u]nder extreme conditions, the area may need permanent protection or removal of grazing for long periods (Clay and Webster 1989).* The situation is extreme because headcuts are likely lowering water tables, exacerbating erosion, and reducing wildlife and fish habitat. Furthermore, some previous attempts to stabilize headcuts

have failed but removal of livestock at one headcut on Jack Creek and development of abundant vegetation has largely stabilized further headcuting (Photo 14).

27. **We object to proposed interior fencing of exclosures to increase grazing area because saturated/unstable soils prevent stable fencing to control livestock**

A previous Forest Service response to KSWild comment about range readiness states that "*protection fences would be constructed to protect fens inside the Squirrel Camp; Dry Meadow; and Round Meadow exclosures."* Attempts to exclude from grazing only small portions of Management Area 8 Riparian Areas (fens) as proposed with the Alternatives 3 and 5 often meets with failure because the fencing structures sink into marshy peat soils.

Clearly, the extreme moisture conditions in unique ground water fens and adjacent wet meadows require livestock exclusion over broad areas as provided in Forest Plan 4-137: "*Under extreme conditions, the area may need permanent protection or removal of grazing for long periods (Clay and Webster 1989)."* Also the Forest Plan provides that management for riparian areas include some upland areas for wildlife. It does not provide for protection of the de minimus amount of riparian habitat as proposed with alternative 3 and5.

28. **We object to the EA because it fails to adequately disclose that cattle will become mired and die in fens which can contribute substantially to pollution of the aquifer.**

Cattle loss is an irreversible and potentially significant impact that cannot be mitigated with adaptive management. The EA:3-66 states "[t]here have been a couple incidents of cattle getting stuck and dying in this area [upper Jack OSF habitat]. Besides the pollution effect, the economic loss of whole cow may not justify the pounds gained from cattle foraging in fens. Due to this unique risk of mortality to cattle in fens, many fens are never "range ready" and it is not responsible grazing management to allow this risk to routinely occur.

29. **The EA fails to disclose that cumulative impacts from a century of livestock grazing are not easily reversible with mere exclusion of livestock. Restoration will require costly intervention.**

Repairing Jack Creek area headcuts will require expensive engineering. Livestock trails causing gully erosion will need filling. Restoration of beaver will require active restoration of willow and aspen. Ponds will need to be constructed to augment habitat for spotted frogs. (See 2009 Jack Creek Restoration Scoping notice and 2011 Scoping notice, attached). Economic analysis fails to include the costs of restoration needed due to historic an ongoing livestock grazing.

30. **The EA assertions that ecologic conditions will improve with reintroduction of grazing into exclosures and pastures (not currently grazed) are not scientifically credible.**

The proposed alternatives 3 and 5 will allow grazing to damage up to 10% bare ground in these sensitive areas contrary to Forest Plan S&G 23. Adaptive management appears to only address impacts in excess of this standard, but long term ecological damage is likely to have occurred long before the 10% Forest Standard is exceeded. Grass may grow back in trampled areas but that does not mean that gullies from trailing or streambank trampling has not contributed to further reduced wetland function (Photos 3,6-12). The EA failed to disclose that resumed grazing in areas currently excluded from grazing is certain to have adverse impacts that will be allowed to accumulate until exclusion is once again necessary. The EA fails to acknowledge that adaptive management strategy to allow grazing until the impacts exceed some standard is not a credible restoration technique. Ecological impacts are not easily reversed with short periods of rest as with deferred grazing. Gullies, headcutting, stream channel widening, aggradation, loss of surface flow and lowered water tables are long term and possibly irreversible impacts.

31. **We object to reintroduction of grazing to the North Sheep pasture because it will have significant impacts to newly detected spotted frogs. This pasture it is still recovering from previous grazing that exceeded Forest Plan Standards for land allocation Riparian Management 8. .** Recent expensive erosion control measures in this pasture will be put at risk with renewed grazing. Grazing will be concentrated in land allocation Riparian Management 8. Proposed grazing will retard further recovery and contribute towards a downward trend. Trespass grazing is common in this pasture and needs to be stopped before authorizing new grazing. Ongoing trespass grazing may already be causing downward trend or exceedance of Forest Plan standards.

32. **The EA fails to adequately disclose that cattle will be allowed into wet meadows and fens where streambanks will be trampled and pedestalling increased. We object to the EA relying on an outdated and likely inaccurate stream survey to justify grazing along the stream.**

A previous Forest Service response to KS Wild comment about outdated 2003 stream survey stated that surveys *"infer a 10-year re-inventory recurrence interval for all fish-bearing streams. A stream survey conducted in 2003 would not be repeated until 2013; survey is not outdated. The level II stream surveys are not conducted on private lands without permission of landowner."* The Forest knew that the stream survey would be ten years old when the AMP decision was made. It's now 2014 and management decisions continue to be based on the outdated and likely inaccurate stream survey. EA impact analysis and resulting grazing management is not being informed about new information that would show deteriorated conditions on Jack Creek from past grazing (Photos 3,6-12). The Forest Service is disingenuous to propose private term agreements on private lands and then claim they cannot complete stream survey data because owner's permission is required. If we presume permission cannot be obtained for stream surveys, the predicted improved conditions on private lands cannot be verified. Private land stream reaches are likely to have degraded conditions that are contrary to what is reported in the 2003 survey and also contribute to overall degraded conditions of Jack Creek. Known poor stream conditions on private lands are not disclosed even though federal term agreements are anticipated for these stream areas.

A previous Forest Service response to KS Wild comment about assessment of stream bank stability states "*At the time of the 2003 survey the Jack Creek riparian fence had not yet been constructed and the riparian area adjacent to Jack Creek was grazed (see page 19 of the Fisheries BE). cobble is not a component of this meadow ecosystem because of the pumice deposit. It is natural for the stream meanders to erode deep channels through the meadow to cut through the pumice in search of bedrock. The processes forming channels in pumice is not the same as you would find in other locations. Rock; cobble; and gravel would have to come from long distances from the mountainous areas; which are not connected to the flatland area. The year round water in this area keeps channels deep and provides open water habitat for spotted frogs. Conifer encroachment has been a concern and has been reduced in many areas. Willow likely was captured as well? Grazing was been going on in this area for 60 years or more and associated impacts would have been recorded if found. Photos do not provide enough information to know if they were taken in a current exclosure and taken long enough ago that the streambank stability photos may have likely healed over. The exclosures have been in place 5 to 10 years and should have healed. Normally these areas recover the following spring and are not evident at the time of cattle turnout. Stream survey was conducted in August 2003; current grazing is May 15 – Sept 30. Cattle were observed by surveyors and their comments state that impact was minimal"*

The Forest Service admits that exclusion is needed to heal streams in 5 years but cannot provide a similar prediction for streams with proposed deferred and high intensity grazing.

A previous Forest Service response to comment states "*streambank stability ranged from 98-100% when quantified as part of the Level II Stream Survey of Jack Creek. Some localized disturbances were found; however overall streambank stability along the length of Jack Creek was high.*" The response fails to acknowledge a scoping report in 2009 that identified numerous projects to correct poor stream conditions for spotted frogs (attached). Implications that Jack Creek is in good condition based on a single parameter (streambank stability) from a ten year old survey are likely misleading and inaccurate. Streams are dynamic and the preparation of the AMP that includes private lands should have triggered a complete stream survey of Jack Creek to provide up to date and relevant technical information to guide decisions about suitability for grazing and habitat conditions for sensitive species such as Miller Lake lamprey and Oregon spotted frog. Jack Creek channel incision, d related down-cutting, and failed attempts to repair headcutting are not accurately evaluated in the EA.

A previous Forest Service response to KSWild comment states that *"[c]obble is not a component of this meadow ecosystem because of the pumice deposit. It is natural for the stream meanders to erode deep channels through the meadow to cut through the pumice in search of bedrock."* During summer 2013 we have observed channel incision of up to 6ft. Vertical streambanks may be a "natural" condition for some portions of Jack Creek but this does not mean that the fine textured material in the streambanks is not vulnerable to damage by livestock. This vulnerability to damage is not adequately disclosed in the

EA and led to false expectations about high future streambank stability with proposed reintroduction of grazing.

A previous Forest Service response to KSWild comment states that *"[g]rass is an important stabilizer in meadow systems."* Fine textured streambanks on Jack Creek are extremely vulnerable to trampling damage by livestock when only grass provides protection. This is demonstrated by the 2009 scoping proposal to reconstruct portions of Jack Creek to provide open water frog habitat where the channel has widened and lost surface flow (attached).

A previous Forest Service response to KSWild comment states that *"the 2003 stream survey has dominant stream bank vegetation as grass and sedge; no mention of willows in report."* Once again the stream survey is outdated with misleading information about the existing 2013 of sporadic patches of willow along the stream. The 2003 survey and subsequent EA failed to report percent willow cover along Jack Creek that is vital to recent introduction of beaver. Hopefully, when surveyors are informed of the importance of willow, this would cause willow to be reported in an updated survey. Existing willow need to be supplemented with willow plantings. Vulnerable willow plantings need to be made as recommended in Jack Creek Site Management Plan and managed with livestock exclusion.

33. **Alternatives 2, 3 and 5 fail to provide protection and monitoring to meet INFISH and Winema National Forest standards for Jack Creek and Miller Lake Lamprey. Jack Creek in the North Sheep Pasture has not been stream inventoried for habitat or surveyed for fish. Jack Creek in private Jameson Pastures have not been stream inventoried for habitat or surveyed for fish. The EA fails to demonstrate that INFISH Riparian Management Objectives for Jack Creek are being met on private lands proposed for grazing or in North Sheep Pasture. Similarly, neither the EA nor the Monitoring Plan provides quantitative riparian monitoring criteria to demonstrate that riparian areas are being maintained or enhanced.**

As previously stated, the 2003 stream survey is outdated and inadequate to base impact assessment or monitoring for Miller Lake Lamprey. The EA fails to identify any recent biological (population), distribution, or habitat surveys on Jack Creek since the 2005 Conservation Plan for Miller Lake Lamprey was approved by ODFW. Similarly the EA fails to identify any recent biological (population), distribution or habitat surveys on Jack Creek for Miller Lake lamprey prey species, the speckled dace. The EA fails to provide data about Lower Bank Angle. INFISH Resource Management Objective requires that more than 75% of banks with less than 90 degree angle (EA:3-165). Down-cutting and incision on Jack Creek has likely exceeded this standard since there are many extensive areas with vertical cut stream banks. The EA:3-165 states:

> "The pumice substrate appears to scour easily due to the presence of deeper pools and isolated pools separated by shallow or dry sections of stream channel. Pool habitats are present in Jack Creek; however, INFISH pool frequency criteria may not be appropriate in such a small, low gradient

headwater stream as Jack Creek."

Since INFISH pool frequency criteria may not be appropriate for the intermittent nature of Jack Creek it would seem prudent to identify what surface water criteria is needed for Jack Creek. None was identified for monitoring. The Monitoring Plan has no items identified in Jack Creek for monitoring by a fish biologist. The required AMP resource coordination with fisheries is not being implemented.

Lacking any real data, the EA3-171 speculates about Miller Lake lamprey in Jack Creek in the North Sheep Pasture:

> The addition of the North Sheep Pasture increases the length of Jack Creek that is grazed, as Jack Creek flows through the North Sheep Pasture. However, Jack Creek has intermittent flows in this portion of the project area and would only provide seasonal habitat for Miller Lake lamprey. Any ammocoetes that move downstream into this area during high flows, must either move upstream into the perennial sections as flows recede or will be stranded and perish. The effects of adding the North Sheep pasture to the allotment would therefore be minimal.

The assertion that impacts would be "minimal' is not based on any documented habitat inventory, documented observations, or documented biological survey data. The EA fails to demonstrate compliance with INFISH Riparian Management Objectives for Jack Creek in the North Sheep Pasture. The EA fails to disclose damage to Jack Creek from chronic trespass grazing (Photo 3).

34. The EA provides no data about Forest Service interdisciplinary monitoring of Jack Creek or Oregon spotted frog monitoring subsequent to the 2013 grazing season. The conspicuous lack of any 2013 monitoring data in the new EA, demonstrates that the Fremont-Winema forest lacks the resources and commitment to carry out the meager monitoring identified in Appendix G for alternatives 2, 3, and 5.

The Monitoring Plan G-8 says there will be an interdisciplinary field visit to Jack Creek to determine if undesired impacts are occurring. Undesirable impacts did occur (Photos 3,4,5) but the EA failed to indicate that there was any interdisciplinary post grazing assessment of impacts to Jack Creek in 2013. This is important because based on field observations in 2013, alternatives 2,3 and 5 can be expected to violate Forest Plan standards every year while the Fremont-Winema Forest can ignore citizen monitoring with impunity.

Economics

35. The costs associated with alternatives 3 and 5 to increase grazing distribution and

increase duration of grazing are impractical ($222,160 in year 1;EA2-28) and do not comply with Allotment Management Planning Standards and Guidelines 9-18, and 9-19. These alternatives are clearly not cost effective to administer for either the Forest Service or the permittee. Additional restoration costs with proposed grazing are not included in economic analysis.

Environmental Impact Statement

NEPA directs federal agencies to prepare a detailed "environmental impact statement" (EIS) for major federal actions that may significantly affect the quality of the environment. 42 U.S.C. § 4332(2)(C). NEPA's implementing regulations define "significantly" to include actions which may adversely affect public health or safety and/or unique characteristics of the geographic area such as proximity to park lands, wetlands and ecologically critical areas or whether the action threatens a Federal or State law or requirements imposed for the protection of the environment.

36. New information and changed circumstances previously discussed mean that the anticipated "Finding of No Significant Impact" for Alternatives 3 and 5 would be an egregious error as further discussed below. The logical decision for the Forest Service is to reduce grazing distribution impacts so that an EIS is not necessary (Alternative 4).

40 CFR § 1508.27 Significantly.
Significantly as used in NEPA requires considerations of both context and intensity:
(a) *Context.* This means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short- and long-term effects are relevant.
(b) *Intensity.* This refers to the severity of impact. Responsible officials must bear in mind that more than one agency may make decisions about partial aspects of a major action. The following should be considered in evaluating intensity:

(1) Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.

The adverse effect of trampled frogs and locally degraded critical habitat cannot be ignored as "significant" with repeated touting of purported grazing benefit (Photos 3,4).

(2) The degree to which the proposed action affects public health or safety.

Citizens hiking on public lands along Jack Creek are at risk of being trampled by aggressive cattle. A woman narrowly escaped injury from being charged by cattle during summer 2013. The incident was reported to the Forest Service and law enforcement.

Biologists cannot monitor Jack Creek spotted frogs if their personal safety is at risk. We think it is significant that the public will be expected to carry firearms for personal safety when visiting Jack Creek This is not to be construed as general safety issue for all public lands grazing, quite the contrary, it is about this permitee's cattle grazing along Jack Creek where personal safety is put at risk.

(3) Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

The Jack Creek area (Chemult Pasture) has one of the greatest concentration of fens (Ground Water Dependent Ecosystems) in the region with numerous sensitive plants and animals. All sensitive plants and animals are put at some level of risk with proposed livestock grazing.

(4) The degree to which the effects on the quality of the human environment are likely to be highly controversial.

Reintroducing livestock grazing into recovering riparian areas is highly controversial with both the scientific community and the public. Both value certainty for recovery of sensitive species. The recreation oriented public values natural appearing wetlands free of soil damage, odor, flies, and cow feces. The human relationship with the environment is enhanced when people see and hear live frogs. The human relationship with the environment is seriously damaged when they seeing dead frogs on public lands trampled to death by private livestock. Seeing public wetlands damaged by private livestock is a serious adverse impact to their expected and desired relationship with the natural environment.

(5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

Continued and increased livestock grazing in fens and spotted frog habitat is highly likely to have unknown risks

(**6) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration**.

Reintroduction of livestock into riparian exclosures recovering from past grazing establishes a precedent for other AMP's to open up protected areas to livestock grazing with widespread use of "Adaptive Management" and untested "short duration" grazing. Renewed grazing in North Sheep Pasture and reintroduction of grazing in existing exclosures is a significant impact because the grazing will destroy the natural appearance, degrade soil, and degrade wildlife habitat on thousands of acres of public lands.

(7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a

cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.

Chronic short duration trespass grazing when added to proposed short duration grazing is likely to create cumulative significant impacts to sensitive fens, spotted frogs, and spotted frog habitat (Photos 3,4). Cumulative impacts of past, present and foreseeable grazing would also be significant because they contribute to a major decline of Jack Creek spotted frogs (Proposed Listing).

(8) The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.

Proposed livestock grazing in unique peat forming fens will alter baseline (pristine) conditions for future scientific inquiry about hydrology, , ecological processes, and geochemical processes. What is "natural" and what is caused by livestock will be blurred because there are no substantial controls with no grazing.

(9) The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

Proposed critical spotted frog habitat will be damaged by "short duration" with up to 10% destruction to bare ground. Short duration grazing will trample to death an unknown number of spotted frogs now proposed for federal listing. Authorizing grazing in Jack Creek spotted frog habitat would contribute to the need for listing and increase the likelihood of local extirpation. Extirpation of an isolated population is a rare event and certainly significant.

(10) Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

The proposed grazing in Alternatives 2, 3 and 5 violate numerous Standards and Guidelines of the Winema National Forest Plan as described previously. Proposed degradation of riparian areas and fens currently in good condition to 10% or more bare ground from proposed livestock trampling would require a Plan Amendment.

Environmental Assessment Availability

37. We object to the Fremont-Winema National Forest requiring citizens to submit a Freedom of Information Act request to obtain a copy of the EA and its appendices during the 30 day comment period.

This requirement effectively precluded us from reviewing color maps during the comment period and precluded many citizens from obtaining copy of the EA. This requirement also violates 15001.1(b) of the National Environmental Policy Act:
40CFR part 1500.1 Purpose. (b) NEPA procedures must insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken.

New References

USDI Fish and Wildlife Service. 2012. Two page letter dated November 7, 2012 from L.R. Sada (UFWS) to G. Westlund (USFS).

USDI Fish and Wildlife Service. 2013a. Endangered and Threatened Wildlife and Plants; Threatened Status for Oregon Spotted Frog. 78FR53582-53623

USDI Fish and Wildlife Service. 2013b. Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Oregon Spotted Frog. 78FR53538-53579

Ott and Johnson. 2005. Beaver Influence on Fisheries Habitat: Livestock Interactions

Conclusion

We object to the Fremont-Winema National Forest prematurely issuing a highly flawed and outdated EA for 30 day public review period. The EA has not been adequately updated due to well-known changed circumstances and new information concerning the August 2013 proposed listing of Oregon spotted frog and proposed designation of critical habitat in Jack Creek. The cause of decline of Jack Creek spotted frogs is complex, but the 1990 Winema National Forest Plan was certainly deficient in failing to develop a pro-active conservation oriented land use allocation for Jack Creek that could have averted spotted frog decline. The outdated 1990 Forest Plan continues to fail threatened frogs with misplaced priorities as demonstrated with the proposed expansion and duration of livestock grazing into areas barely recovering from past grazing abuse. We hope the Forest Service would see the futility of further promoting livestock grazing to improve habitat for spotted frog by choosing modified alternative 4 that would remove annual grazing from all of Jack Creek and most fens in the Chemult Pasture. We again offer to collaborate with the Forest to pursue a plan amendment that will make restoration and protection for Jack Creek and the Walker Rim groundwater dependent ecosystems the highest priority for the Forest and provide certainty for long-term viability of spotted frogs and other sensitive species.

Sincerely,

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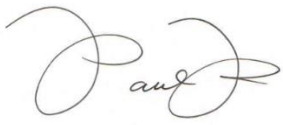

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